



STARS AC-1 Course Inventory

Supplemental documents enclosed highlight the sustainability-across-the-curriculum programs that were active until Dallas College was consolidated under a single accreditation in June 2020. Results reflected in Table 1 and Table 3.

- Brookhaven College Sustainability Scholars Program: spring 2019 to spring 2020 (BHC Scholars)
- Cedar Valley College Quality Teaching In Practical Sustainability (QTIPS) Program: fall 2013 to spring 2020
- North Lake College SAGE (Sustainability Awareness and Global Education (SAGE) Scholars Program: fall 2013 to spring 2020

This course inventory also includes a summary of current Dallas College sustainability-across-the-curriculum activities and results of the Reframing the Curriculum Initiative: Social Justice and Sustainability from May 2019 to July 2021. Results are shown in Table 2.

Dallas College conducted a course catalog analysis utilizing the course catalog descriptions and the recommended list of key words by AASHE-STARS to identify courses with embedded sustainability-focused or sustainability-inclusive curriculum and/or if course descriptions address a global sustainability challenge. The results in Table 4 starting on page 84 indicates that approximately 1,117 courses have at least one key word from the recommended list.

Table 1. Summary of sustainability focused and inclusive courses (2018-21)

Total number of undergraduate courses offered by the institution	2,461
Number of undergraduate courses offered that are sustainability-focused	121
Number of undergraduate courses offered that are sustainability-inclusive	339
Percentage of courses offered that are sustainability-focused or sustainability-inclusive	18.69%
Total number of academic departments that offer courses	21
Number of academic departments with sustainability course offerings	19
Percentage of academic departments that have sustainability course offerings	90.48%





Required Documentation

Institution must provide an inventory conducted during the previous three years to identify its sustainability course offerings and describe for current and prospective students how each course addresses sustainability.

For each course, the inventory must include:

- The title, department (or equivalent), and level of the course (e.g., undergraduate or graduate).
- A brief course description or rationale explaining why the course is included that references sustainability, the interdependence of ecological and social/economic systems, or a sustainability challenge.
- An indication of whether the course qualifies as sustainability-focused or sustainability-inclusive (or equivalent terminology).

A course may be sustainability-focused or sustainability-inclusive; no course should be identified as both. Courses for which partial or incomplete information is provided may not be counted toward earning points for this credit. This credit does not include continuing education and extension courses, which are covered by the Continuing Education credit in Public Engagement. An institution that has developed a more refined approach to course classification may use that approach as long as it is consistent with the definitions and guidance provided.





Table 2. Results of Dallas College Reframing the Curriculum: Sustainability & Social Justice with the UN 17 SDGs (Summer 2019 - Summer 2021) https://storymaps.arcgis.com/stories/16638cc896c4455f9c3a22a88382706a

About:

Launched May 10, 2019, Reframing the Curriculum is an initiative to train faculty and staff the Santone Framework, to utilize existing curriculum and assignments with a social justice and sustainability lens. This kick-off training consisted of three workshops with Susan Santone, author of "Reframing the Curriculum: Design for Social Justice and Sustainability." There were 17 faculty and 12 staff in first train the trainer, and 6 faculty signed up for the first faculty cohort.

In Spring 2021, while still in the middle of a global pandemic, the first cohort was launched to continue the learning framework for social justice and sustainability across the curriculum. There were two cohorts in spring 2021 resulting in 11 faculty and 3 staff completing the 5-week training program.

For Summer 2021, there are four staff signed up for cohort #3 from the \$3 million Title V Hispanic Serving Institution (HSI) grant award that Dallas College received from the U.S. Department of Education to support expansion of educational opportunities and marketable skills, and specifically introduction of new programming such as culturally-responsive course enhancement.

Summer 2019 Train the Trainer Results

Discipline	Course(s) or Department(s)	Faculty or Staff	School	Participant in previous Sustainability Programs? Y or N.
Arts, Humanities	ARTS-1301, HUMA-1032, HUMA-1315	Faculty	School of Creative Arts, Entertainment & Design	Y
Biology	BIOL-1406, BIOL-1408	Faculty	School of Engineering, Technology, Mathematics & Science	N
Chemistry	CHEM-1405, CHEM-1406, CHEM-1407	Faculty	School of Engineering, Technology, Mathematics & Science	N
Chemistry	CHEM-2425	Faculty	School of Engineering, Technology, Mathematics & Science	Y
Education	EDUC-1300	Faculty	School of Education	Y





Environmental			School of Engineering, Technology,	
Science	ENVR 1401	Faculty	Mathematics & Science	N
Geology	GEOL-1405	Faculty	School of Engineering, Technology, Mathematics & Science	Υ
Government	GOVT-2304, GOVT-2305, GOVT-2306	Faculty	School of Law and Public Service	N
Government	GOVT-2305, GOVT-2306	Faculty	School of Law and Public Service	N
History	HIST-1301, HIST-1302	Faculty	School of Law and Public Service	N
Humanities, Music	HUMA-1302, HUMA-1315, MUAP-1129	Faculty	School of Creative Arts, Entertainment & Design	N
Psychology	PSYC-2301, PSYC-2306, PSYC-2314, PSYC-2317, PSYC-2319	Faculty	School of Law and Public Service	N
Sociology	SOCI-1301	Faculty	School of Law and Public Service	N
Sociology	SOCI-1301	Faculty	School of Law and Public Service	Υ
Sociology	SOCI-1301	Faculty	School of Law and Public Service	N
Spanish	SPAN-1411, SPAN-1412	Faculty	School of Creative Arts, Entertainment & Design	N
Speech Communications	SPCH-1311	Faculty	School of Creative Arts, Entertainment & Design	N
Operations	Talent Central	Staff	Sr. Director	N
Operations, Business Affairs	Veteran's Affairs	Staff	Executive Director	N
Operations, Social Responsibility & Inclusion	Sustainability	Staff	Executive Administrator	N
Operations, Social Responsibility & Inclusion	Sustainability	Staff	Assistant Director, Education	N
Academic Affairs	E-Learning	Staff	Associate Dean	N
Student Success	Student Success	Staff	Associate Dean	N





Operations, Social Responsibility &				Υ
Inclusion	Sustainability	Staff	Assistant Director, Operations	
Workforce & Advancement	Workforce & Economic Development	Staff	Director	N
Academic Affairs	E-Learning	Staff	Dean	Y
Student Success	Mentor Program	Staff	Success Coach	N
Academic Affairs	Academic Services	Staff	Associate Dean	Y
Operations	Talent Central	Staff	Assistant Director	Y

Discipline	Course(s)	Faculty	School	Participant in past Sustainability Programs? Y or N.
English	ENGL-1301, ENGL-1302	Faculty	School of Creative Arts, Entertainment & Design	Υ
Environmental Science, Geology	ENVR-1401, GEOL-1401	Faculty	School of Engineering, Technology, Mathematics & Science	N
Computer Information Technology	ITSC-1301	Faculty	School of Engineering, Technology, Mathematics & Science	N
Government	GOVT-2305	Faculty	School of Law and Public Service	N
English	ENGL-1301, ENGL-1302	Faculty	School of Creative Arts, Entertainment & Design	Υ

Spring 2021, Cohort 2 Results June 2021

				Participant in
				past
Discipline	Course(s)	Faculty	School	Sustainability
				Programs?
				Y or N.





Business Management, Marketing	BMGT-1301, BMGT-1327, HRPO-2301, MRKG-1311	Faculty	School of Business, Hospitality & Global Trade	Υ
Philosophy & Ethics	PHIL-1301, PHIL-1304, PHIL-2306	Faculty	School of Law and Public Service	N
Government	GOVT-2305, GOVT-2306	Faculty	School of Law and Public Service	N
English	ENGL-1301, ENGL-1302	Faculty	School of Creative Arts, Entertainment & Design	Υ
U.S. History	HIST-1301, HIST-1302	Faculty	School of Law and Public Service	Υ
English	ENGL-1301, ENGL-1302	Faculty	School of Creative Arts, Entertainment & Design	N
Academic Affairs	Center for Independent Studies	Staff	Instructional Specialist	N
Academic Affairs	Communications, Journalism	Staff	Learning Laboratory Specialist	N
Brookhaven Campus	President's Office	Staff	President (former Math professor)	Υ

Summer 2021, Cohort 3 in July 2021

Division	Department	Staff	Title	Participant in past Sustainability Programs? Y or N.
Academic Affairs	HSI Title V, El Centro	Staff	Director	N
Academic Affairs	HSI Title V, Eastfield	Staff	Director	N
Academic Affairs	HSI Title V, Eastfield	Staff	Grants Program Coordinator	N
Academic Affairs	HSI Title V, LeCroy	Staff	Instructional Designer	N





Table 3. Course inventory results of Brookhaven, Cedar Valley and North Lake sustainability-focused and sustainability-inclusive courses. Each offering or section of a course was counted as an individual course.

Program	Year	Courses	Course Title	Sustainability- Focused or Sustainability- Inclusive	Sustainability Curriculum Component
Cedar Valley QTIPS	2014-20	ACCT- 2301	Principles of Financial Accounting	Focused	Students discuss ethics in accounting and talk about companies in the past that have suffered due to poor ethical decisions such as Enron, Arthur Anderson and Olympus Accounting scandal.
Cedar Valley QTIPS	2014-20	ACCT- 2302	Principles of Managerial Accounting	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ACNT- 1303	Introduction to Accounting I	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ACNT- 1311	Introduction to Computerized Accounting	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ACNT- 1313	Computerized Accounting Applications	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ACNT- 1329	Payroll and Business Tax Accounting	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ACNT- 1331	Federal Income Tax: Individual	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ACNT- 1380	Cooperative Education in Accounting	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ACNT- 2380	Cooperative Education in Accounting	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Brookhaven Sustainability Scholars	2019-20	ARTC- 1302	Digital Imaging I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment includes a presentation on the SDGs, overview of sustainability color palettes and visual poster representing one or more of the SDGs.
Brookhaven Sustainability Scholars	2019-20	ARTC- 1305	Basic Graphic Design	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment includes a presentation on the SDGs, overview of sustainability color palettes, and digital design using recycled materials available in industry such as corrugated cardboard and recycled-content paper used for product packaging.
Brookhaven Sustainability Scholars	2019-20	ARTC- 1309	Basic Illustration	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment includes a presentation on the SDGs, overview of sustainability color palettes, and digital design using recycled materials available in industry such as corrugated cardboard and recycled-content paper used for product packaging.
Brookhaven Sustainability Scholars	2019-20	ARTC- 1353	Computer Illustration	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment includes a presentation on the SDGs, overview of sustainability color palettes and visual poster representing one or more of the SDGs.





North Lake SAGE Scholars	2014-20	ARTS- 1301	Art Appreciation	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is Chris Jordan Daily Assignment, students explore purposes and function of art for social and political awareness. The grade is worth 15% of overall course grade, requiring a reflection essay, global idea or statistic they believe needs more attention or awareness. The art requirement must be original, not done before, and link to critical thinking of the awareness goal using statistical data from Chris Jordan's TED Talk and work. Rubric includes plagiarism check for art and writing and constructive feedback.
North Lake SAGE Scholars	2014-20	ARTS- 1301	Art Appreciation	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on landscape paintings and ecofriendly materials
North Lake SAGE Scholars	2014-20	ARTS- 1301	Art Appreciation	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on eco-friendly materials.
North Lake SAGE Scholars	2014-20	ARTS- 1303	Art History I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on landscape paintings and ecofriendly materials.
North Lake SAGE Scholars	2014-20	ARTS- 1304	Art History II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on landscape paintings and ecofriendly materials





North Lake SAGE Scholars	2014-20	ARTS- 1311	Design I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier), Global Citizenship and Service Learning. Students are introduced to the concept of sustainability, the SDGs, and how art can inform people of local and global issues. Every spring semester, the student assignment focuses on recycled art replicating famous masterpieces with repurposed, reused or recycled materials. The students' sustainable works have been recognized by the National Wildlife Federation RecycleMania Case Study Award, and continues to be a cornerstone sustainability assignment example since 2015 through this spring 2021.
North Lake SAGE Scholars	2014-20	ARTS- 1312	Design II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is to repurpose cardboard boxes. Students reuse cardboard to create a sculpture. Group project is 10% of overall semester grade and individual project is 5% of overall semester grade.
Brookhaven Sustainability Scholars	2019-20	ARTS- 1312	Design II	Inclusive	17 UN SDGs with focus on SDG-12. Sustainability-inclusive (Economy, Society). Student assignment is a campus installation project with sustainable materials.
North Lake SAGE Scholars	2014-20	ARTS- 1316	Drawing I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier), Global Citizenship and Service Learning. Students are introduced to the concept of sustainability, the SDGs, and how art can inform people of local and global issues.
North Lake SAGE Scholars	2014-20	ARTS- 1317	Drawing II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier), Global Citizenship and Service Learning. Students are introduced to the concept of sustainability, the SDGs, and how art can inform people of local and global issues.
North Lake SAGE Scholars	2014-20	ARTS- 2311	Design III	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier), Global Citizenship and Service Learning. Students are introduced to the concept of sustainability, the SDGs, and how art can inform people of local and global issues.





North Lake SAGE Scholars	2014-20	ARTS- 2311	Design III	Inclusive	17 UN SDGs with focus on all SDGs 9, 12 and 15. Sustainability-inclusive (Economy, Environment), Global Citizenship and Service Learning. The assignment "Ceramics and Geological Impact", reflects 10% of students' final grades. This is a lecture-based assignment that informs students about the materials they are using to create art. Students are prompted to trace the origins of a specific clay. As a class, we identify the ingredients of the clay body, and trace these ingredients backwards from our classroom, to the DFW clay distributor, all the way to the mines themselves. By using google earth, and citing the periodic table, students will identify the origins of their materials in tandem with ceramic industry. Students are made aware of their carbon footprint while observing the footprint of other entities that are using the same materials.
North Lake SAGE Scholars	2014-20	ARTS- 2316	Painting I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on landscape paintings and ecofriendly materials
North Lake SAGE Scholars	2014-20	ARTS- 2326	Sculpture I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on Peace Poles and RecycleMania
North Lake SAGE Scholars	2014-20	ARTS- 2327	Sculpture II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on Peace Poles and RecycleMania
Brookhaven Sustainability Scholars	2019-20	ARTS- 2333	Printmaking	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment includes a presentation on the SDGs, overview of sustainability concepts for printmaking including sustainable, reusable and recyclable materials.
North Lake SAGE Scholars	2014-20	ARTS- 2346	Ceramics I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on Peace Poles and RecycleMania





North Lake SAGE Scholars	2014-20	ARTS- 2346	Ceramics I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on Peace Poles and RecycleMania
Brookhaven Sustainability Scholars	2019-20	ARTS- 2347	Ceramics II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment includes a presentation on the SDGs, overview of sustainability campus goals and project to make a sculpture for the Brookhaven Windmill Garden.
Brookhaven Sustainability Scholars	2019-20	ARTS- 2347	Ceramics II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment includes a presentation on the SDGs, overview of sustainability campus goals and project to make a sculpture for the Brookhaven Windmill Garden.
North Lake SAGE Scholars	2014-20	ARTS- 2347	Ceramics II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on Peace Poles and RecycleMania
North Lake SAGE Scholars	2014-20	ARTS- 2347	Ceramics II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on Peace Poles and RecycleMania
North Lake SAGE Scholars	2014-20	ARTS- 2356	Photography I	Focused	The three areas of sustainability are introduced; economy, environment, and society with a focus on reuse, repurpose and recycling. This course has a focus on emerging art trends like featured at Burning Man, a global cultural movement and arts festival that takes place in the desert and follows leave-no-trace sustainability principles.
Brookhaven Sustainability Scholars	2019-20	AUMT- 1305	Introduction to Automotive Technology	Inclusive	17 UN SDGs with focus on SDG-9: Industry, Innovation and Infrastructure. Sustainability-inclusive (Environment, Economy). Student assignments include overview of automotive technology, safety and materials management, local and state codes including emissions testing and responsible hazardous waste management and reuse when possible.





Cedar Valley QTIPS	2014-20	AUMT- 1305	Introduction to Automotive Technology	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	AUMT- 1306	Automotive Engine Removal and Installation	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	AUMT- 1307	Automotive Electrical Systems	Inclusive	17 UN SDGs with focus on SDG-9: Industry, Innovation and Infrastructure. Sustainability-inclusive (Environment, Economy). Student assignments include overview of automotive electrical systems, including advanced electrical systems in currently available hybrid and electric vehicles.
Cedar Valley QTIPS	2014-20	AUMT- 1307	Automotive Electrical Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	AUMT- 1310	Automotive Braking Systems	Inclusive	17 UN SDGs with focus on SDG-9: Industry, Innovation and Infrastructure. Sustainability-inclusive (Environment, Economy). Student assignments include overview of modern braking systems, including regenerative braking systems in hybrid and electric vehicles.
Cedar Valley QTIPS	2014-20	AUMT- 1310	Automotive Brake Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	AUMT- 1316	Automotive Suspension and Steering Systems	Inclusive	17 UN SDGs with focus on SDG-9: Industry, Innovation and Infrastructure. Sustainability-inclusive (Environment, Economy). Student assignments include overview of suspension and steering systems including responsible management if hydraulic fluids and reuse when possible.
Cedar Valley QTIPS	2014-20	AUMT- 1316	Automotive Suspension and Steering Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	AUMT- 1319	Automotive Engine Repair	Inclusive	17 UN SDGs with focus on SDG-9: Industry, Innovation and Infrastructure. Sustainability-inclusive (Environment, Economy). Student assignments include overview of all engine types, diesel, gasoline, flex-fuel, and a chapter on alternative fuel, hybrid and electric engines.





Cedar Valley QTIPS	2014-20	AUMT- 1319	Automotive Engine Repair	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	AUMT- 1345	Automotive Climate Control Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	AUMT- 1380	Cooperative Education in Automotive Mechanic Technician	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	AUMT- 1381	Cooperative Education in Automotive Mechanic Technician	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	AUMT- 2311	Automotive Electronic Controls	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	AUMT- 2313	Automotive Drive Train and Axles	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	AUMT- 2317	Automotive Engine Performance Analysis	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	AUMT- 2321	Automotive Electrical Diagnosis and Repair	Inclusive	17 UN SDGs with focus on SDG-9: Industry, Innovation and Infrastructure. Sustainability-inclusive (Environment, Economy). Student assignments include overview of electronic diagnostics tools utilized for identifying automotive repairs, including all available vehicle types that use gasoline, diesel, flex fuel, alternative fuel, hybrid and electric power.
Cedar Valley QTIPS	2014-20	AUMT- 2321	Automotive Electrical Diagnostic and Repair	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	AUMT- 2325	Automotive Automatic Transmission and Transaxles	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	AUMT- 2328	Automotive Service	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	AUMT- 2332	Automotive Automatic Transmission and Transaxles II	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Cedar Valley QTIPS	2014-20	AUMT- 2334	Automotive Engine Performance Analysis II	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	AUMT- 2380	Cooperative Education: Automotive Mechanic Technician	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	AUMT- 2381	Cooperative Education: Automotive Mechanic Technician	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	BCIS- 1405	Business Computer Applications	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	BIOL- 1406	Biology for Science Majors I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The photosynthesis chapter is utilized to highlight sustainability concepts like renewable energy and biomimicry.
North Lake SAGE Scholars	2014-20	BIOL- 1406	Biology for Science Majors I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The photosynthesis chapter is utilized to highlight sustainability concepts like renewable energy and biomimicry.
North Lake SAGE Scholars	2014-20	BIOL- 1406	Biology for Science Majors I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The photosynthesis chapter is utilized to highlight sustainability concepts like renewable energy and biomimicry.
North Lake SAGE Scholars	2014-20	BIOL- 1406	Biology for Science Majors I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The photosynthesis chapter is utilized to highlight sustainability concepts like renewable energy and biomimicry.





North Lake SAGE Scholars	2014-20	BIOL- 1406	Biology for Science Majors I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The photosynthesis chapter is utilized to highlight sustainability concepts like renewable energy and biomimicry.
North Lake SAGE Scholars	2014-20	BIOL- 1406	Biology for Science Majors I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The photosynthesis chapter is utilized to highlight sustainability concepts like renewable energy and biomimicry.
Cedar Valley QTIPS	2014-20	BIOL- 1406	Biology for Science Majors I	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	BIOL- 1406 (LAB)	Biology for Science Majors I Lab	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The photosynthesis chapter is utilized to highlight sustainability concepts like renewable energy and biomimicry.
North Lake SAGE Scholars	2014-20	BIOL- 1406 (LAB)	Biology for Science Majors I Lab	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The photosynthesis chapter is utilized to highlight sustainability concepts like renewable energy and biomimicry.
North Lake SAGE Scholars	2014-20	BIOL- 1406 (LAB)	Biology for Science Majors I Lab	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The ecosystems chapter is utilized to highlight sustainability concepts like food webs and indicator species used to evaluate health.





North Lake SAGE Scholars	2014-20	BIOL- 1407	Biology for Science Majors II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The ecosystems chapter is utilized to highlight sustainability concepts like food webs and indicator species used to evaluate health.
North Lake SAGE Scholars	2014-20	BIOL- 1407	Biology for Science Majors II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The ecosystems chapter is utilized to highlight sustainability concepts like food webs and indicator species used to evaluate health.
North Lake SAGE Scholars	2014-20	BIOL- 1407	Biology for Science Majors II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The ecosystems chapter is utilized to highlight sustainability concepts like food webs and indicator species used to evaluate health.
Cedar Valley QTIPS	2014-20	BIOL- 1407	Biology for Science Majors II	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	BIOL- 1407 (LAB)	Biology for Science Majors II Lab	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The ecosystems chapter is utilized to highlight sustainability concepts like food webs and indicator species used to evaluate health.





North Lake SAGE Scholars	2014-20	BIOL- 1407 (LAB)	Biology for Science Majors II Lab	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on biological systems and ecosystems and their interdependency to sustain life and resources. The ecosystems chapter is utilized to highlight sustainability concepts like food webs and indicator species used to evaluate health.
Brookhaven Sustainability Scholars	2019-20	BIOL- 1408	Biology for Non-Science Majors I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987) and Global Citizenship. Student assignment focuses on renewable energy, photosynthesis, and interconnected systems. Student have option to volunteer in the Brookhaven Windmill Garden to earn Service Learning credit.
North Lake SAGE Scholars	2014-20	BIOL- 1408	Biology for Non-Science Majors I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is "Photosynthesis, Sustainability, Recycling and Renewing" where students design PowerPoints for lecture and microscope slides for lab, photograph them and then introduce them on PowerPoint. Pictures and material are researched from the internet and Latest Bio in the news topics/articles on sustainability are also added. Some semesters it is a group project and some semesters, it is an individual project. Students also in a way advertise and educate each other on Sustainability. The assignment grade is 5% of Lecture Test 2; 60 points for an article on sustainability as biology in the news. Resources used by students for the assignment include different resources online, latest journals published on Science and Nature or any peer reviewed journal, the college library, and the course textbook.





North Lake SAGE Scholars	2014-20	BIOL- 1408	Biology for Non-Science Majors I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is "Photosynthesis, Sustainability, Recycling and Renewing" where students design PowerPoints for lecture and microscope slides for lab, photograph them and then introduce them on PowerPoint. Pictures and material are researched from the internet and Latest Bio in the news topics/articles on sustainability are also added. Some semesters it is a group project and some semesters, it is an individual project. Students also in a way advertise and educate each other on Sustainability. The assignment grade is 5% of Lecture Test 2; 60 points for an article on sustainability as biology in the news. Resources used by students for the assignment include different resources online, latest journals published on Science and Nature or any peer reviewed journal, the college library, and the course textbook.
North Lake SAGE Scholars	2014-20	BIOL- 1409	Biology for Non-Science Majors II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is "Photosynthesis, Sustainability, Recycling and Renewing" where students design PowerPoints for lecture and microscope slides for lab, photograph them and then introduce them on PowerPoint. Pictures and material are researched from the internet and Latest Bio in the news topics/articles on sustainability are also added. Some semesters it is a group project and some semesters, it is an individual project. Students also in a way advertise and educate each other on Sustainability. The assignment grade is 5% of Lecture Test 2; 60 points for an article on sustainability as biology in the news. Resources used by students for the assignment include different resources online, latest journals published on Science and Nature or any peer reviewed journal, the college library, and the course textbook.





North Lake SAGE Scholars	2014-20	BIOL- 1409	Biology for Non-Science Majors II	Inclusive	Biological concepts for non-science majors including emphasis on human systems and ecological systems and interdependence of people and their environment.
North Lake SAGE Scholars	2014-20	BIOL- 1409	Biology for Non-Science Majors II	Inclusive	Biological concepts for non-science majors including emphasis on human systems and ecological systems and interdependence of people and their environment.
Cedar Valley QTIPS	2014-20	BIOL- 1409	Biology for Non-Science Majors II	Inclusive	There are assignments related to 'Environment in the News.' Students have to write two papers based on recently published news articles. The papers should explain what the paper is about and it should include the student's opinion and point of view. These papers can be replaced by participating in a community event related to environmental sustainability.
North Lake SAGE Scholars	2014-20	BIOL- 1411	General Botany	Inclusive	Campus Plant Walk. Student assignment includes a lecture, discussion and campus tour to identify plant species and types that are native, adaptive, invasive, edible, drought tolerant, and function in the local ecosystem for environmental sustainability goals.
North Lake SAGE Scholars	2014-20	BIOL- 1411	General Botany	Inclusive	Campus Plant Walk. Student assignment includes a lecture, discussion and campus tour to identify plant species and types that are native, adaptive, invasive, edible, drought tolerant, and function in the local ecosystem for environmental sustainability goals.
North Lake SAGE Scholars	2014-20	BIOL- 2401	Anatomy and Physiology I	Inclusive	Student assignment includes overview of sustainability importance to health and wellness with a focus on SDG-3 and utilizing microscope slides and model of healthy and diseased organ systems caused by toxic chemical exposure, genetic diseases and pathogenic diseases.





North Lake SAGE Scholars	2014-20	BIOL- 2402	Anatomy and Physiology II	Inclusive	Student assignment includes overview of sustainability importance to health and wellness with a focus on SDG-3 and utilizing microscope slides and model of healthy and diseased organ systems caused by toxic chemical exposure, genetic diseases and pathogenic diseases.
North Lake SAGE Scholars	2014-20	BIOL- 2406	Environmental Biology	Focused	Coursework focuses on principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Laboratory activities will reinforce these concepts. The SDGs are included that are supported by the United Nations Environment Program, specifically SDG-13: Climate Action, SDG-14: Life below Water, and SDG-15: Life on Land.
North Lake SAGE Scholars	2014-20	BIOL- 2406	Environmental Biology	Focused	Coursework focuses on principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Laboratory activities will reinforce these concepts. The SDGs are included that are supported by the United Nations Environment Program, specifically SDG-13: Climate Action, SDG-14: Life below Water, and SDG-15: Life on Land.
Cedar Valley QTIPS	2014-20	BIOL- 2406	Environmental Biology	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





North Lake SAGE Scholars	2014-20	BIOL- 2420	Microbiology for Non- Science Majors	Focused	This course is included in the Study Abroad to the Galapagos Islands to explore bio-cultural conservation through the lens of microbiology. This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. The lab covers basics of culture and identification of bacteria and microbial ecology. Lecture and lab emphasis is on medical microbiology, infectious diseases, and public health.
North Lake SAGE Scholars	2014-20	BIOL- 2420	Microbiology for Non- Science Majors	Inclusive	This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. The lab covers basics of culture and identification of bacteria and microbial ecology. Lecture and lab emphasis is on medical microbiology, infectious diseases, and public health.
Cedar Valley QTIPS	2014-20	BIOL- 2421	Microbiology for Science Majors	Inclusive	We discuss how to take care of bio-hazard materials the proper way. In all Biology classes, 'cellular metabolism' is taught. In this, we teach above bigger molecules broken down into smaller ones and the same small molecules reused to build different, bigger molecules. This basic unit of life, cell, show a great amount of sustainability. This can also be related to organisms and population-ecosystem levels and day —to-day life.





Cedar Valley QTIPS	2014-20	BMGT- 1327	Principles of Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	BMGT- 2383	Cooperative Education in Business Administration and Management	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is to determine a project that will meet college sustainability goals and course expectations outlined by instructor. Student is supervised by the sustainability staff for this course-credit co-operative internship and meets with appropriate staff, faculty, students, or community to meet goals of the project. Student is responsible for developing two to four objectives to complete the project by a mutually agreed upon deadline by the student, supervisor, and instructor. Student is evaluated using template rubric for all Co-Operative Courses, evaluating work-place skills such as communication, group collaboration, and project management. Student projects have focused on: Logistics Transportation Assessment between NLC Central, North, South and West Campuses, and Logistics Supply Chain Assessment of Scope 3 Pollution Emissions using NLC FedEx Shipping/Receiving Data.





North Lake SAGE Scholars	2014-20	BMGT- 2383	Cooperative Education in Business Administration and Management	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is to determine a project that will meet college sustainability goals and course expectations outlined by instructor. Student is supervised by the sustainability staff for this course-credit co-operative internship and meets with appropriate staff, faculty, students, or community to meet goals of the project. Student is responsible for developing two to four objectives to complete the project by a mutually agreed upon deadline by the student, supervisor, and instructor. Student is evaluated using template rubric for all Co-Operative Courses, evaluating work-place skills such as communication, group collaboration, and project management. Student projects have focused on: Office Technology Support for College Sustainability Operations in Data Entry and Analysis; Office Technology Support for College Sustainability Operations in Standards and Certifications; and Office Technology Support for College Sustainability Operations in Media.
Cedar Valley QTIPS	2014-20	BMGT- 2384	Cooperative Education in Management and Supervision	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	BNKG- 1353	Mortgage Lending	Inclusive	Overview of the mortgage lending market and process. Emphasis on documentation, credits evaluation, federal regulation and state laws related to mortgage loans, including incentives and rebates from sustainable home features like solar panels, energy efficiency, weatherization, and water efficiency.





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North Lake SAGE Scholars	2014-20	BNKG- 1359	Loan Servicing	Inclusive	This course examines how mortgage lenders handle loans from the time a loan is closed until the final payment is made. The course focuses on the legal aspects and actual procedures used in the daily operations of the loan servicing function. Topics include escrow accounting, contract servicing, governmental regulations, taxing authorities and establishing tax rates and economic impacts of delinquency. Sustainable concepts include how home upgrades can impact a loan, such as energy efficiency, solar panels, and water efficiency.
North Lake SAGE Scholars	2014-20	BUSG- 1303	Principles of Finance	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student individual assignment is "Re-Inventing Fire Project" worth 20 points. Students must read a portion of a chapter in the book Reinventing Fire on how individuals and businesses can start now to adopt currently available alternative energy technologies at normal rates of return to save energy and thus improve the environment. The emphasis of this assignment is on environmental sustainability. They must make a written report and an oral presentation to the class. The written report is a standard essay with a "hook" Introduction, a thesis paragraph and other facts and then a conclusion. Student group assignment is "Financial Planning Project" with an emphasis on economic sustainability. A team of 3 or 4 students will be asked to develop a financial plan for a nephew that they have been given guardianship over with limited financial resources to enable this child to go from the 2nd grade to college. They follow a detail rubric of facts and details. On other occasions they will have an elder parent of relative that needs to be placed in elder care. Combined these two sustainability assignments are 10% of overall course grade.





North Lake SAGE Scholars	2014-20	BUSG- 1304	Financial Literacy	Inclusive	A study of the financial principles when managing financial affairs. Includes topics such as budgeting, retirement, property ownership, savings, and investment planning. Course includes an overview of sustainable finance and investment markets.
North Lake SAGE Scholars	2014-20	BUSI- 1301	Business Principles	Focused	17 UN SDGs with focus on all SDGs 5, 6, 7, 8, 9, 10, 11, 12. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is "Business Ethics and Social Responsibility" focuses on teach student awareness of business ethics to prepare managers to be more responsible. Student will identifying ethical concerns that arise in the business world. This assignment includes a reflection essay on how the students current views on the social responsibility of business have evolved, how their current workplace present employment practices are being used to counteract past abuses. There will be group in class discussion where students will describe the major types of pollution, their causes, and their cures that is tied directly to our course textbook chapter 3 & 4.
North Lake SAGE Scholars	2014-20	BUSI- 1301	Business Principles	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is a "Global Business Plan Presentation" where students choose any country and investigate how globalization has affected the country in areas of the SDGs. Students submit their presentations on online and are graded for Organization, Content, Delivery, and Completeness.
North Lake SAGE Scholars	2014-20	BUSI- 1301	Business Principles	Inclusive	17 UN SDGs. Sustainability concepts in business plan
North Lake SAGE Scholars	2014-20	BUSI- 1301	Business Principles	Inclusive	17 UN SDGs. Environmental Policy and Compliance, case study on Frito Lay North America
Cedar Valley QTIPS	2014-20	BUSI- 1301	Business Principles	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





North Lake SAGE Scholars	2014-20	BUSI- 1307	Personal Finance	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student individual assignment is "Re-Inventing Fire Project" worth 20 points. Students must read a portion of a chapter in the book Reinventing Fire on how individuals and businesses can start now to adopt currently available alternative energy technologies at normal rates of return to save energy and thus improve the environment. The emphasis of this assignment is on environmental sustainability. They must make a written report and an oral presentation to the class. The written report is a standard essay with a "hook" Introduction, a thesis paragraph and other facts and then a conclusion. Student group assignment is "Financial Planning Project" with an emphasis on economic sustainability. A team of 3 or 4 students will be asked to develop a financial plan for a nephew that they have been given guardianship over with limited financial resources to enable this child to go from the 2nd grade to college. They follow a detail rubric of facts and details. On other occasions they will have an elder parent of relative that needs to be placed in elder care. Combined these two sustainability assignments are 10% of overall course grade.
Cedar Valley QTIPS	2014-20	BUSI- 1307	Personal Finance	Inclusive	Students read and report to class on about 10-15 pages of a book titled 'Reinventing Fire' on energy efficiency and conservation
Cedar Valley QTIPS	2014-20	BUSI- 2301	Business Law	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	CHEM- 1405	Introduction to Chemistry I for Non- Science Majors	Focused	Increase awareness of the impact consumer choices have across production, packaging, disposal costs and life cycle assessment involving major elements on the periodic table.
North Lake SAGE Scholars	2014-20	CHEM- 1405	Introduction to Chemistry I for Non- Science Majors	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on products and services that are made possible by chemistry.





North Lake SAGE Scholars	2014-20	CHEM- 1405	Introduction to Chemistry I for Non- Science Majors	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on products and services that are made possible by chemistry.
North Lake SAGE Scholars	2014-20	CHEM- 1405	Introduction to Chemistry I for Non- Science Majors	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on products and services that are made possible by chemistry.
North Lake SAGE Scholars	2014-20	CHEM- 1406	Introduction to Chemistry I for Allied Health Majors	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on products and services that are made possible by chemistry.
North Lake SAGE Scholars	2014-20	CHEM- 1411	General Chemistry I for Science Majors	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on products and services that are made possible by chemistry.
North Lake SAGE Scholars	2014-20	CHEM- 1411	General Chemistry I for Science Majors	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on products and services that are made possible by chemistry.
North Lake SAGE Scholars	2014-20	CHEM- 1411	General Chemistry I for Science Majors	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on products and services that are made possible by chemistry.
Cedar Valley QTIPS	2014-20	CHEM- 1411	General Chemistry I	Inclusive	Engage the students socially and show them the diverse culture they share and the ethics of respecting the world in which they live. Social issues are covered in readings. eCampus is used along with PowerPoint to reduce the amount of paper and energy used. Discuss the benefits of growing food – discuss the chemical ingredients used in prepared foods. Are they healthy?
Cedar Valley QTIPS	2014-20	CHEM- 1412	General Chemistry II	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	CNBT- 1301	Introduction to Construction Industry	Focused	This course includes an overview of the green construction industry segment of the overall construction industry, case studies of local and global construction companies that have USGBC-LEED projects and overview of the SDGs.





North Lake SAGE Scholars	2014-20	CNBT- 1302	Mechanical, Plumbing and Electrical Systems in Construction I	Inclusive	This courses provides students technical skills for energy and water systems in commercial and residential construction, including the most efficient products and technologies to meet budget scope or green building standards.
North Lake SAGE Scholars	2014-20	CNBT- 1311	Construction Methods and Materials I	Inclusive	This course provides students an introduction to construction methods and materials including sustainable concepts such as green certified building materials, efficient and lean construction.
North Lake SAGE Scholars	2014-20	CNBT- 1342	Building Codes and Inspections	Focused	This course includes overview of energy and water conservation codes from municipal to international level.
North Lake SAGE Scholars	2014-20	CNBT- 1346	Construction Estimating	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on products and services that are made possible by chemistry.
North Lake SAGE Scholars	2014-20	CNBT- 2315	Green Building	Focused	This is a sustainability-focused course (Barbier 1987) with a focus on green building and industry standards such as USGBC-LEED, EPA Energy Star, BREEAM and Living Building Challenge. Methods and materials used for buildings that conserve energy, water, and human resources.
North Lake SAGE Scholars	2014-20	CNBT- 2342	Construction Management I	Focused	Students will define terms associated with construction supervision, leadership, motivation, problem solving, and decision making. Students will demonstrate problem solving and decision-making skills in construction problems. They will apply green and sustainable building codes and standards and demonstrate techniques for successful contractor interaction including professional protocol and communication.
North Lake SAGE Scholars	2014-20	CNBT- 2344	Construction Management II	Focused	A management course in contract documents, safety, planning, scheduling, production control, and law and labor. Topics include contracts, planning, cost and production peripheral documents, and cost and work analysis. Student assignment includes EPA Energy Star and USGBC-LEED.





Brookhaven Sustainability Scholars	2019-20	COMM- 1307	Introduction to Mass Communication	Inclusive	17 UN SDGs with a focus on all 17. Sustainability-inclusive (Environment and Society or Economy). Student assignment includes overview of real-world issues and mass communication strategies for informing the local and global community.
Brookhaven Sustainability Scholars	2019-20	COMM- 1316	News Photography I	Inclusive	17 UN SDGs with a focus on all 17. Sustainability-inclusive (Environment and Society or Economy). Student assignment includes overview of real-world issues and news photography strategies for best representing the theme of a news story with imagery.
Brookhaven Sustainability Scholars	2019-20	COMM- 1318	Photography I	Inclusive	17 UN SDGs with a focus on all 17. Sustainability-inclusive (Environment and Society or Economy). Student assignment includes overview of real-world issues and includes nature photography strategies.
Brookhaven Sustainability Scholars	2019-20	COMM- 2311	Media Writing	Inclusive	17 UN SDGs with a focus on all 17. Sustainability-inclusive (Environment and Society or Economy). Student assignment includes overview of real-world issues and media writing to inform diverse audiences.
Brookhaven Sustainability Scholars	2019-20	COMM- 2315	News Reporting	Inclusive	17 UN SDGs with a focus on all 17. Sustainability-inclusive (Environment and Society or Economy). Student assignment includes overview of real-world issues and news reporting to inform diverse audiences.
Cedar Valley QTIPS	2014-20	COSC- 1301	Introduction to Computing	Focused	Students are taught the value of Energy Star settings and products and the impact it has on the environment. Harare features and setting minimize energy consumption. We discuss software products that can help improve tin the reduction of energy usage and the various approaches being taken.
Cedar Valley QTIPS	2014-20	COSC- 1401	Introduction to Computing	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	COSC- 1415	Fundamentals of Programming	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Cedar Valley QTIPS	2014-20	COSC- 1436	Programming Fundamentals I	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	COSC- 1437	Programming Fundamentals II	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	COSC- 2436	Programming Fundamentals III	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	CRIJ- 1301	Introduction to Criminal Justice	Focused	17 UN SDGs with focus on SDG-16 Peace, Justice and Strong Institutions. Sustainability-focused (Barbier's Venn Diagram 1987) and Service Learning. Student assignment is a Policy Analysis paper on a criminal justice issue that focuses on one or more of the 17 SDGs including the interdependence of social and ecological systems. Students are encouraged to sign-up for the DART GoPass if they are eligible.
Cedar Valley QTIPS	2014-20	DEMR- 1229	Preventative Maintenance	Focused	Students will learn preventative maintenance and how it can have environmental and economic impacts. Properly maintained vehicles operate more efficiently than those that are not which will have a positive effect on the environment by lowering the carbon footprint of that vehicle. Economic impacts of proper maintenance, is fewer vehicle breakdowns which means lower operating costs for the vehicle. Social sustainability comes through proper communication and interaction with customers, and maintaining ethical business practices.
Cedar Valley QTIPS	2014-20	DEMR- 1301	Shop Safety and Procedures	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	DEMR- 1305	Basic Electrical Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	DEMR- 1306	Diesel Engine I	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	DEMR- 1317	Basic Brake Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Cedar Valley QTIPS	2014-20	DEMR- 1321	Power Train I	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	DEMR- 1323	Heating, Ventilation, Air, and Conditioning (HVAC) Repair	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	DEMR- 1327	Tractor Trailer Service and Repair	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	DEMR- 1330	Steering and Suspension	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	DEMR- 1380	Cooperative Education Diesel Mechanic Technician	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	DEMR- 1421	Power Train I	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	DEMR- 2331	Advanced Brake Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	DIRW- 0305	Integrated Reading and Writing	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	DIRW- 0310	Integrated Reading and Writing	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	DIRW- 0310	Integrated Reading and Writing	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	DIRW- 0310	Integrated Reading and Writing	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.





Brookhaven Sustainability Scholars	2019-20	DMAT- 0315	Developmental Mathematics Algebra Support	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment includes a reference to the SDGs and real-world applications for math.
North Lake SAGE Scholars	2014-20	ECOL- 1305	People and Their Environment	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987). Environmental awareness and knowledge are emphasized. Topics include pollution, erosion, land use, energy resource depletion, overpopulation, and the effects of unguided technological development. Proper planning of societal and individual action in order to protect the natural environment is stressed.
North Lake SAGE Scholars	2014-20	ECON- 2301	Principles of Macroeconomics	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	ECON- 2301	Principles of Macroeconomics	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is "Should unemployment be viewed as an individual or social responsibility?" Student discuss the topic in lecture and the topic is 25 points of a test grade. Students utilize resources from the Bureau of Labor Statistics https://www.bls.gov/ and CIA World Fact Book (guide to country comparisons) https://www.cia.gov/library/publications/the-world-factbook/.
North Lake SAGE Scholars	2014-20	ECON- 2302	Principles of Microeconomics	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	ECON- 2302	Principles of Microeconomics	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	EDUC- 1300	Learning Framework	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.





North Lake SAGE Scholars	2014-20	EDUC- 1300	Learning Framework	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	EDUC- 1300	Learning Framework	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
Cedar Valley QTIPS	2014-20	EDUC- 1300	Learning Framework	Inclusive	Sustainability Principles are incorporated into lectures along with projects that encourage students to discuss and analyze how solutions can be applied.
Cedar Valley QTIPS	2014-20	EDUC- 1301	Introduction to the Teaching Profession	Focused	One of the concepts of EDUC is an ethics unit. There is ample room in this course unit to incorporate an ethical dilemma involving sustainability concept. The example was given: which is more sustainable – an incandescent bulb or a CFL bulb, which costs less? Which do you buy and why? How would you justify your answer?
Cedar Valley QTIPS	2014-20	ENER- 1371	Sustainable Sites and Water Efficiency	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ENER- 1372	Sustainable Materials & Resources	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ENER- 1373	Fundamentals of Building Energy Technology	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ENER- 1375	Mechanical Systems in Commercial Buildings	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ENER- 1472	Mechanical Systems in Commercial Buildings	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ENER- 2370	Energy Conservation Codes & Standards	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ENER- 2371	Indoor Environmental Quality	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Cedar Valley QTIPS	2014-20	ENER- 2373	Fundamentals of Building Commissioning	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ENER- 2378	Energy Conservation Measures	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	ENGL- 1301	Composition I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is focused on the Open Book Project with an essay that includes one or more of the 17 SDGs. Selections of the Open Book Project have been: "Where Am I Eating" by Kelsey Timmerman and "Global Weirdness: Severe Storms, Deadly Heat Waves, Relentless Drought, Rising Seas, and the Weather of the Future" by Climate Central, a non-profit journalism and research foundation.
Brookhaven Sustainability Scholars	2019-20	ENGL- 1301	Composition I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is an essay that must include one or more of the 17 SDGs through the lens of Global Citizenship.
Brookhaven Sustainability Scholars	2019-20	ENGL- 1301	Composition I	Focused	17 UN SDGs with focus on SDGs: 1-15. Sustainability-focused (Barbier 1987) and Global Citizenship. Student assignment utilizes the annual Open Book Project for student essays and a focus on the SDGs. In 2019-20, the assignment was on Kelsey Timmerman's Where Am I Eating? That gets into Fair Trade issues regarding coffee, chocolate and apple juice production. The topics associated with these include No Poverty, Decent Work & Economic Growth, Innovation, Industry & Infrastructure, Reduced Inequalities, Responsible Consumption & Production, Life below Water, and Life on Land.





Brookhaven Sustainability Scholars	2019-20	ENGL- 1301	Composition I	Focused	17 UN SDGs with focus on SDGs: 1-15. Sustainability-focused (Barbier 1987) and Global Citizenship. Students participate in face-to-face and online discussions related to food deserts and insecurities. They research these issues at local, state, and national-levels. Following the discussions, students write a response paper where they analyze their research and findings.
Brookhaven Sustainability Scholars	2019-20	ENGL- 1301	Composition I	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship and Service Learning. Sustainable Equity Assignment: Students choose one of the 17 sustainable developmental goals to focus on for their informative and argumentative essay assignments. They then rhetorically analyze five articles related to their focus topic, use critical inquiry to guide their investigation of the issue as it pertains to various contexts, synthesize the material in their own expository and persuasive writing, and critically reflect on their investigation, research, and learning about the issue. In addition to writing, students share their growing knowledge in large classroom discussions, in small group discussions and activities, and individually with the professor during conferences. Finally, students participate in service learning activities and campus events that pertain to their chosen topic. Therefore, the entire course is focused on reading and writing practices viewed through various critical lenses of issues and contexts related to the 17 United Nations Sustainable Development Goals.
Brookhaven Sustainability Scholars	2019-20	ENGL- 1301	Composition I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987). Student assignments include an essay assignment on a local or global issues that impacts the student directly.
Brookhaven Sustainability Scholars	2019-20	ENGL- 1301	Composition I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignments include reading and writing about local and global issues.





North Lake SAGE Scholars	2014-20	ENGL- 1301	Composition I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is a Socio-Political Essay worth 20 points. Students identify persuasive writing techniques, analyze visual propaganda, and evaluate an important local or global political issues in sustainability areas such as energy, fast food, textiles, beauty, or groceries.
Cedar Valley QTIPS	2014-20	ENGL- 1301	Composition I	Focused	We define the verb 'to sustain.' In the discussion we discussed the finite nature of fossil fuels and the need for oil to make plastics.
North Lake SAGE Scholars	2014-20	ENGL- 1301	Composition I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	ENGL- 1301	Composition I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is "Visual Analysis using Sustainability and Global Topics" and is worth 20 points. This assignment includes the following areas of sustainability and global topics: social issues, humanitarian, environmental, economic, wildlife, education, community, or natural resources. Students are asked to watch the video, Reggie Shaw's Texting and Driving Story, and review "60 Powerful Issue Ads that'll Make you Stop and Think."





North Lake SAGE Scholars	2014-20	ENGL- 1301	Composition I	Inclusive	17 UN SDGs with focus on all SDGs 4, 10 16. Sustainability-inclusive (Economy, Society), Global Citizenship and Service Learning. Student assignment is "Above the Noise" research and argument unit address social justice issues such as bail reform, gerrymandering, race and college admission, light-skin privilege, school segregation, hate speech on college campuses, and the #metoo movement in hip-hop. Students (1) research a selected topic, (2) give a short presentation and respond to their classmates' arguments, and (3) write a logic-based argument, using research from the North Lake College databases. This assignment is worth 30 points.
North Lake SAGE Scholars	2014-20	ENGL- 1301	Composition I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	ENGL- 1301	Composition I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
Brookhaven Sustainability Scholars	2019-20	ENGL- 1302	Composition II	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship. Students participate in face-to-face and online discussions related to food deserts and insecurities. They research these issues at local, state, and national-levels. Following the discussions, students write a response paper where they analyze their research and findings.





Brookhaven Sustainability Scholars	2019-20	ENGL- 1302	Composition II	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship and Service Learning. Sustainable Equity Assignment for ENGL 1302: Students choose one of the 17 sustainable developmental goals to focus on for their argumentative essays and final research project. They then rhetorically analyze eight articles related to their focus topic, use critical inquiry to guide their investigation of the issue as it pertains to various contexts, synthesize the material in their own expository and persuasive writing, and critically reflect on their investigation, research, and learning about the issue. In addition to writing, students share their growing knowledge in large classroom discussions, in small group discussions and activities, and individually with the professor during conferences. Finally, students participate in service learning activities and campus events that pertain to their chosen topic. Therefore, the entire course is focused on reading and writing practices viewed through various critical lenses of issues and contexts related to the 17 United Nations Sustainable Development Goals.
Brookhaven Sustainability Scholars	2019-20	ENGL- 1302	Composition II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignments include reading and writing about local and global issues.
North Lake SAGE Scholars	2014-20	ENGL- 1302	Composition II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is a Research Composition Essay wroth 20 points. Students identify research writing techniques and research a sustainability topic such as a specific sustainability career, an endangered species, or a family member's contribution to a sustainability goal.





North Lake SAGE Scholars	2014-20	ENGL- 1302	Composition II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is "Argument Research Essay on Sustainability and Human Rights" worth 20 points. Students identify research writing techniques and must argue a for or against claim on a specific sustainability topic in areas of Health, Culture, Food, Economics, Energy, and Environment.
North Lake SAGE Scholars	2014-20	ENGL- 1302	Composition II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	ENGL- 1302	Composition II	Inclusive	17 UN SDGs with focus on all SDGs 4, 10 16. Sustainability-inclusive (Economy, Society), Global Citizenship and Service Learning. Student assignment is "Above the Noise" research and argument unit address social justice issues such as bail reform, gerrymandering, race and college admission, light-skin privilege, school segregation, hate speech on college campuses, and the #metoo movement in hip-hop. Students (1) research a selected topic, (2) give a short presentation and respond to their classmates' arguments, and (3) write a logic-based argument, using research from the North Lake College databases. This assignment is worth 30 points.
North Lake SAGE Scholars	2014-20	ENGL- 1302	Composition II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	ENGL- 1302	Composition II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	ENGL- 1302	Composition II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.





Cedar Valley QTIPS	2014-20	ENGL- 1302	Composition II	Inclusive	Students complete critical readings on sustainability.
North Lake SAGE Scholars	2014-20	ENGL- 2307	Creative Writing	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	ENGL- 2327	American Literature I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	ENGL- 2332	World Literature	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	ENGL- 2342	Forms of Literature I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
Cedar Valley QTIPS	2014-20	ENGL- 2342	Studies in Literature	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	ENGR- 1201	Introduction to Engineering	Focused	17 UN SDGs with focus on SDGs: 2, 3, 4, 5, 7, 9, 10, 11, 12, 13, 15, 16. Sustainability-focused (Barbier 1987). The student assignment is a choice of two projects and rotated each semester. One student assignment is a Sustainable Engineered Game for Kids utilizing the SDG framework. Another student assignment involves partnering with a community organization to solve a challenge with a sustainable engineering solution, for example students engineered a bicycle that uses human power to turn compost with the City of Farmers Branch. Emphasis is placed on ethics, justice, equality, and sustainability, all in the context of engineering, regarding local and global sustainability.





North Lake SAGE Scholars	2014-20	ENVR- 1401	Environmental Science	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. The course is a sustainability-focused course using the textbook, "Essential Environment: The Science Behind the Stories." All quizzes and texts from the textbook cover the following topics: Overview of Sustainability, Environmental Ethics, Energy and Ecosystems, Biodiversity and Population Ecology, Invasive Species, Law and Policy, Global Sustainable Development, Human Populations and Demographics, Food and Agriculture, Forests and Resource Management, Environmental Health and Risk Assessment, Atmosphere, Oceans, and Global Climate Change, Nonrenewable and Renewable Resources, Recycling and Waste Management, and Sustainable Urban Cities.
Brookhaven Sustainability Scholars	2019-20	ESOL- 0031	ESOL Listening / Speaking	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987). Student assignments include discussion topics of local and global issues.
Cedar Valley QTIPS	2014-20	ESOL- 0031	English as a Second Language Listening and Speaking	Focused	We have a lesson in healthy and unhealthy materials. Students can always benefit from listening and speaking practice by listening to talks or lectures on sustainable issues as well as present sustainable ideas from their experience and culture that they have learned and practiced.
Cedar Valley QTIPS	2014-20	ESOL- 0033	English as a Second Language Speaking	Focused	Students discuss economic and environmental trade-offs of decisions. Students prepare and present persuasive speeches focusing on environmental, economic, and social sustainability.
Brookhaven Sustainability Scholars	2019-20	ESOL- 0041	ESOL Reading	Inclusive	17 UN SDGs with focus on SDG-3 Good Health and Wellbeing. Sustainability-inclusive (Environment, Society). Student assignment focuses discussion and a reflection paper on Living to Eat or Eating to Live? And Eating Organic Foods.





Brookhaven Sustainability Scholars	2019-20	ESOL- 0042	ESOL Reading	Inclusive	17 UN SDGs with focus on SDGs: 3, 6, 12. Sustainability inclusive (Environment, Society). Student assignment focuses on discussion and a reflection paper on Indoor Air Pollution and Water Quality.
Brookhaven Sustainability Scholars	2019-20	ESOL- 0043	ESOL Reading	Focused	17 UN SDGs with focus on SDGs: 2, 3, 12. Sustainability- focused (Barbier 1987). Student assignment focuses discussion and a reflection paper on How to Make Golden Rice and The Global Food Fight.
Brookhaven Sustainability Scholars	2019-20	ESOL- 0315	ESOL Integrated Reading and Writing	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignments include reading and writing about local and global issues.
Brookhaven Sustainability Scholars	2019-20	GEOG- 1301	Physical Geography	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987). Student assignment utilizes ESRI StoryMaps to explore the SDGs and relationships and influence of location on social, economic, and environmental topics.
Brookhaven Sustainability Scholars	2019-20	GEOG- 1302	Human Geography	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987). Student assignment utilizes ESRI StoryMaps to explore the SDGs and human impacts on the environment.
Cedar Valley QTIPS	2014-20	GEOL- 1401	Earth Sciences for Non- Majors I	Focused	Students discuss recycling issues from a resource standpoint and an economic standpoint. We talk about the consequences of not recycling. Examples include aluminum, glass, and other metals. We also discuss water and soil conservation.





Brookhaven Sustainability Scholars	2019-20	GEOL- 1401	Earth Sciences for Non- Science Majors I	Inclusive	17 UN SDGs with focus on SDGs: 6, 7, 11, 13. Sustainability-inclusive (Environment, Society). Student assignment is titled "CO2 and You, How Much is Too Much?" One of the places that we discuss sustainability during the semester is when we talk about chemicals in the atmosphere. We talk about how CO2 is a part of our atmosphere but that the amount has been increasing over time. One of the things I have them do is create a graph that compares amounts of CO2 in the atmosphere to temperature rise in degrees over decades. (The data starts in the 50's and ends in the late 90's.) So they can see how the increase in CO2 is directly related to the rise in temperatures. Once they understand cause and effect I have them do an ecological footprint exercise that gives them an idea of what their personal impact on the environment is. Then we have a discussion about what would happen if everyone lived in a way that disregards the sustainability of our planet.
North Lake SAGE Scholars	2014-20	GEOL- 1401	Earth Science	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
Brookhaven Sustainability Scholars	2019-20	GEOL- 1405	Environmental Science	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment involves a guest presentation on the UN SDGs and campus sustainability goals in preparation for a laboratory assignment or a semester project that utilizes the campus as a living laboratory. Student assignments have included: measuring water quality of the campus creek and submitting the report to administration, measuring solid waste and recycling on the campus and submitting the report to administration, and participating in the EPA Rainworks Challenge making recommendations for green infrastructure utilizing campus plans and data.
North Lake SAGE Scholars	2014-20	GEOL- 1405	Environmental Science	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.





Cedar Valley QTIPS	2014-20	GEOL- 1445	Oceanography	Focused	Emphasis on the importance of the marine fisheries and sustainable conservation.
North Lake SAGE Scholars	2014-20	GEOL- 1445	Oceanography	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
Brookhaven Sustainability Scholars	2019-20	GISC- 1125	Concepts and Careers in Geographic Information Systems (GIS)	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Brookhaven Sustainability Scholars	2019-20	GISC- 1145	Geographic Information Systems (GIS) for Engineers	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Brookhaven Sustainability Scholars	2019-20	GISC- 1147	Three Dimensional Analysis in Geographic Information Systems (GIS)	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Brookhaven Sustainability Scholars	2019-20	GISC- 1191	Special Topics in Cartography	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Brookhaven Sustainability Scholars	2019-20	GISC- 1391	Special Topics in Cartography	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.





Brookhaven Sustainability Scholars	2019-20	GISC- 1401	Cartography and Geography in Geographic Information Systems (GIS) and Global Positioning System (GPS)	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Brookhaven Sustainability Scholars	2019-20	GISC- 1411	Introduction to Geographic Information Systems (GIS)	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Brookhaven Sustainability Scholars	2019-20	GISC- 1421	Introduction to Raster- Based Geographic Information Systems (GIS)	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Brookhaven Sustainability Scholars	2019-20	GISC- 2231	Advanced Problems in Geographic Information Systems (GIS)	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Brookhaven Sustainability Scholars	2019-20	GISC- 2311	Geographic Information Systems (GIS) Applications	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Brookhaven Sustainability Scholars	2019-20	GISC- 2320	Intermediate Geographic Information Systems (GIS)	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.





Brookhaven Sustainability Scholars	2019-20	GISC- 2335	Programming for Geographic Information Systems (GIS)	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Brookhaven Sustainability Scholars	2019-20	GISC- 2380	Co-Op Ed-Cartography Cooperative Education in Cartography	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Brookhaven Sustainability Scholars	2019-20	GISC- 2401	Data Acquisition and Analysis in Geographic Information Systems (GIS)	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Cedar Valley QTIPS	2014-20	GISC- 2401	Data Acquisition and Analysis in Geographic Information Systems	Inclusive	A digital syllabus is used in all the classes to avoid the use of paper copies. The students complete a field work collection of environmental sample data with results to improve our own awareness of our imprint.
Brookhaven Sustainability Scholars	2019-20	GISC- 2459	Web-Served Geographic Information Systems (GIS)	Focused	17 UN SDGs with focus on 17. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship or Service Learning. Student assignment includes making digital maps with economic, environmental and social data to address a local community challenge or global challenge.
Brookhaven Sustainability Scholars	2019-20	GOVT- 2305	Federal Government	Focused	17 UN SDGs with focus on SDGs: 4, 5, 6, 7, 10, 11, 13, 16. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship and Service Learning. Student assignment is an Environmental Policy Paper incorporating the SDGs and three areas of sustainability.





Brookhaven Sustainability Scholars	2019-20	GOVT- 2305	Federal Government	Focused	17 UN SDGs with focus on SDGs: 4, 5, 6, 7, 10, 11, 13, 16. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship and Service Learning. Student assignment is an Environmental Policy Paper incorporating the SDGs and three areas of sustainability.
Brookhaven Sustainability Scholars	2019-20	GOVT- 2305	Federal Government	Inclusive	17 UN SDGs with focus on SDGs: 1, 3, 4, 5, 8, 9, 10, 11, 12, 15, 17. Sustainability-inclusive (Economy, Society) and Global Citizenship. Student assignment is watching the documentary film, "The Lottery of Birth." After watching this documentary, the class will be assigned a new identity and tasked with identifying the challenges faced by citizens in disparate communities around the globe. In the first semester, they will become carpet weavers in northern India.
Brookhaven Sustainability Scholars	2019-20	GOVT- 2305	Federal Government	Inclusive	17 UN SDGs with focus on SDGs: 4, 5, 6, 7, 10, 13, 16. Sustainability-inclusive (Environment, Society) and Global Citizenship. Student assignment is community participation in a civic action such as attending a Board meeting or Council meeting, and reflection paper on environmental and social justice awareness.
North Lake SAGE Scholars	2014-20	GOVT- 2305	Federal Government	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	GOVT- 2305	Federal Government	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	GOVT- 2305	Federal Government	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	GOVT- 2305	Federal Government	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.





Cedar Valley QTIPS	2014-20	GOVT- 2305	Federal Government	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	GOVT- 2306	Texas Government	Focused	17 UN SDGs with focus on SDGs: 4, 5, 6, 7, 10, 11, 13, 16. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship and Service Learning. Student assignment is an Environmental Policy Paper incorporating the SDGs and three areas of sustainability.
Brookhaven Sustainability Scholars	2019-20	GOVT- 2306	Texas Government	Focused	17 UN SDGs with focus on SDGs: 4, 5, 6, 7, 10, 11, 13, 16. Sustainability-focused (Barbier 1987) and inclusive of Global Citizenship and Service Learning. Student assignment is an Environmental Policy Paper incorporating the SDGs and three areas of sustainability.
North Lake SAGE Scholars	2014-20	GOVT- 2306	Texas Government	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. The student assignment is the "New York Times Morning Briefing" and is included in participation grade, quiz grade, or test essay questions. Students discuss a global issue covered in the NYT daily news and must investigate background facts and historical government issues in a global context.
North Lake SAGE Scholars	2014-20	GOVT- 2306	Texas Government	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. The student assignment is focused on chapters in the textbook on Texas policy, governance structure, political parties, and special interest group's influence on sustainability policy topic areas of environment, immigration, energy and transportation. Students are encouraged to sign up for the DART GoPass and volunteer for sustainability events on campus or in the community.





Brookhaven Sustainability Scholars	2019-20	GOVT- 2306	Texas Government	Inclusive	17 UN SDGs with focus on SDGs: 6, 8, 9, 10, 16. Sustainability-inclusive (Environment, Society). Student assignment is an Environment Policy Paper with the prompt, "Who Represents You? An investigation of how Texas legislator address environmental issues in the student's home district."
Brookhaven Sustainability Scholars	2019-20	GOVT- 2306	Texas Government	Inclusive	17 UN SDGs with focus on SDGs: 4, 5, 6, 7, 10, 13, 16. Sustainability-inclusive (Environment, Society) and Global Citizenship. Student assignment is community participation in a civic action such as attending a Board meeting or Council meeting, and reflection paper on environmental and social justice awareness.
North Lake SAGE Scholars	2014-20	GOVT- 2306	Texas Government	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
North Lake SAGE Scholars	2014-20	GOVT- 2306	Texas Government	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainability topic readings.
Cedar Valley QTIPS	2014-20	GOVT- 2306	Texas Government	Inclusive	Students are assigned a written critical thinking assignment on an environmental topic such as a gas pipeline. Extra bonus points given for attending a sustainability event. Make a 'zero waste' course that is completely electronic and paperless. Create a service learning opportunity project.
Cedar Valley QTIPS	2014-20	HART- 1356	EPA Recovery Certification Exam Preparation	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	HART- 1394	Special topics in Heating, Air Conditioning, and Refrigeration Mechanic and Repair	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	HART- 1401	Basic Electricity for HVAC	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Cedar Valley QTIPS	2014-20	HART- 1403	Air Conditioning Control Principles	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	HART- 1407	Refrigeration Principles	Inclusive	Introduce the environmental and economic impact of HVAC equipment production.
Cedar Valley QTIPS	2014-20	HART- 1441	Residential Air Conditioning	Inclusive	Students conduct lab exercises where they will be using environmentally friendly refrigerants that are less harmful to the ozone than those used in the past. Students also work with HVAC equipment that operates at a higher efficiency level and uses less energy.
Cedar Valley QTIPS	2014-20	HART- 1445	Gas and Electric Heating	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	HART- 2436	Air Conditioning Troubleshooting	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	HART- 2438	Air Conditioning Installation and Startup	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	HART- 2445	Residential Air Conditioning System Design	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	HART- 2449	Heat Pumps	Inclusive	The main focus is teaching students that a well maintained system will be more energy efficient and consume less electricity, which creates a positive impact to the environment by decreasing the carbon foot print. Also the students discuss green energy sustainable sources like electric solar panels, nuclear power, wind turbines generators, and geothermal heat pumps.





North Lake SAGE Scholars	2014-20	HIST- 1301	United States History I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. The course is sustainability-focused using the main textbook Experience History Vol 1, and supplemental textbook Feasted Landscapes: Sustainability in American Topics Vol1 (Kendall Hunt). The student assignments require reading from the primary textbook and selected readings from the supplemental textbook. Topics include Native American sustainability culture, exploration of the Americas, and challenges across economic, environmental and social struggle that led up to the Civil War.
North Lake SAGE Scholars	2014-20	HIST- 1301	United States History I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. The course is sustainability-focused using the main textbook Experience History Vol 1, and supplemental textbook Feasted Landscapes: Sustainability in American Topics Vol1 (Kendall Hunt). The student assignments require reading from the primary textbook and selected readings from the supplemental textbook. Topics include Native American sustainability culture, exploration of the Americas, and challenges across economic, environmental and social struggle that led up to the Civil War.
Brookhaven Sustainability Scholars	2019-20	HIST- 1301	United States History I	Inclusive	17 UN SDGs with focus on SDGs: 1, 2, 3, 4, 5, 10, 16, 17. Sustainability-inclusive (Economy, Society) and Global Citizenship. Student assignment includes an essay on the Civil Right movement and its impacts on today's popular issues and sustainability.





Cedar Valley QTIPS	2014-20	HIST- 1301	United States History I	Inclusive	Students discuss how the Constitutional Convention of 1787 led to the creation of the U.S. Constitution and a more sustainable government, society, and country. When referring to emerging political parties, Thomas Jefferson said that "every difference in opinion is not a difference in principle." That can certainly be applied to discussions about sustainability. We may have differing opinions regarding it, but the principle is that we want to make the world a better place for future generations. Build on that common ground.
North Lake SAGE Scholars	2014-20	HIST- 1301	United States History I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. The student assignment is called "Unexpected Africa: Investigating New Ways to Think about the Continent." Students work in groups and must make a final group presentation worth 10 points. Student groups focus on the following areas of Africa's influence on U.S. History: Musicians and Artists, Technology and Communication, African Literature, Politics in Africa, Population Growth, International Media, Piracy, and Conflict Wars. Students take a survey on the 7 revolutions outlined by the Center for Strategic and International Studies.
North Lake SAGE Scholars	2014-20	HIST- 1302	United States History II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. The course is sustainability-focused using the main textbook Experience History Vol 2, and supplemental textbook Feasted Landscapes: Sustainability in American Topics Vol 2 (Kendall Hunt). The student assignments require reading from the primary textbook and selected readings from the supplemental textbook. Topics include reconstruction after civil war, sustainability concepts adopted during industrialization, and the modern social-environmental movement through modern-day issues in American History.





North Lake SAGE Scholars	2014-20	HIST- 1302	United States History II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. The course is sustainability-focused using the main textbook Experience History Vol 2, and supplemental textbook Feasted Landscapes: Sustainability in American Topics Vol 2 (Kendall Hunt). The student assignments require reading from the primary textbook and selected readings from the supplemental textbook. Topics include reconstruction after civil war, sustainability concepts adopted during industrialization, and the modern social-environmental movement through modern-day issues in American History.
North Lake SAGE Scholars	2014-20	HIST- 1302	United States History II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. The student assignment is called "Unexpected Africa: Investigating New Ways to Think about the Continent." Students work in groups and must make a final group presentation worth 10 points. Student groups focus on the following areas of Africa's influence on U.S. History: Musicians and Artists, Technology and Communication, African Literature, Politics in Africa, Population Growth, International Media, Piracy, and Conflict Wars. Students take a survey on the 7 revolutions outlined by the Center for Strategic and International Studies.





QTIPS 1302	Projects are assigned based on both social movements and environmental movements as well as on warfare's impact on environment i.e. napalm and agent orange. Include an increased emphasis on sustainability by including more connections to financial sustainability through historical events and decisions like taking the US dollar of the gold standard and social security through the years. We have also discussed students' 'slavery footprint'. Bring in a speaker and have students write an essay on the New Deal and if this led to a sustainable community in regards to the environment, economy, and society. Discuss Theodore Roosevelt's interest in preservation and conservation issues and how it relates to environmentalism today.
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Brookhaven Sustainability Scholars	2019-20	HIST- 1302	United States History II	Inclusive	17 UN SDGs with focus on SDGs: 1, 2, 3, 4, 5, 10, 16, 17. Sustainability-inclusive (Economy, Society) and Global Citizenship. The sustainability assignments for HIST 1302 are as follows: Discussion Board #3 (50 points out of 1,000 points) and Primary Document Analysis #3 (100 points out of 1,000 points). While the previous discussions asked you to consider the impact of the first part of the 20th Century upon our lives, I firmly believe that nothing has done more to shape the America we live in than social movements of the 1960s and 1970s. The profound impact on our government, society, and culture are still being felt today. For this discussion, I would like you to answer the following three questions: 1) What were the greatest "costs" (negative consequences) of the rights movements for the United States of America? 2) What were the greatest "benefits" (positive outcomes) of the rights movements for the United States of America? 3) In your opinion, based upon your previous answers, which movement was the most positive experience for the U.S.? Please make your responses at least one substantial paragraph long each of at least 500 words and include specific historical details, processes, and/or people to support your arguments. Once you have posted to Discussion Board 3, please select at least one other student's post to respond. In a minimum length response of at least one full paragraph, please suggest at least one additional negative consequence and at least one positive outcome that was not included in your classmate's original post. Based upon these additional details you have suggested, explain why you believe your classmate should reconsider their position relative to Question #3 about whether their chosen rights movement was most positive for the United States.





Brookhaven Sustainability Scholars	2019-20	HIST- 1302	United States History II	Inclusive	17 UN SDGs with focus on SDGs: 1, 2, 3, 4, 5, 10, 16, 17. Sustainability-inclusive (Economy, Society) and Global Citizenship. Student assignment includes an essay on the Civil Right movement and its impacts on today's popular issues and sustainability.
Cedar Valley QTIPS	2014-20	HRPO- 2301	Human Resources Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	HRPO- 2307	Organizational Behavior	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	HUMA- 1302	Introduction to Humanities II	Inclusive	17 UN SDGs with a focus on all 17. Sustainability-inclusive (Environment, Society) and Global Citizenship. Student assignment explores the world's cultural heritage and preservation sites designated by UNESCO.
North Lake SAGE Scholars	2014-20	HUMA- 1302	Introduction to Humanities II	Inclusive	17 UN SDGs with a focus on all 17. Sustainability-inclusive (Environment, Society) and Global Citizenship and Service Learning. Student assignments include topics on green, recycling and reuse practices in theater and examples from the Broadway Green Alliance.
North Lake SAGE Scholars	2014-20	HUMA- 1315	Fine Arts Appreciation	Inclusive	17 UN SDGs with a focus on all 17. Sustainability-inclusive (Environment, Society) and Global Citizenship and Service Learning. Student assignments include topics in campus art masterpieces made from sustainable materials such as ceramics and water-color paintings.
North Lake SAGE Scholars	2014-20	HUMA- 2319	American Minority Studies	Focused	17 UN SDGs with a focus on all 17. Sustainability-focused (Barbier) and Global Citizenship and Service Learning. Student assignments include topic on social justice and environmental justice issues.
Cedar Valley QTIPS	2014-20	IBUS- 1300	Global Logistics Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Cedar Valley QTIPS	2014-20	IBUS- 1305	Introduction to International Business and Trade	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	IBUS- 1341	Global Supply Chain Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ITNW- 1425	Fund of Networking Technology	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	ITSC- 1401	Introduction to Computers	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	KINE- 1301	Foundations of Kinesiology	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	LMGT- 1319	Introduction to Business Logistics	Focused	17 UN SDGs with a focus on all 17. Sustainability-focused (Barbier 1987) and Global Citizenship. Student assignments are from the textbook which includes a chapter on sustainability.
North Lake SAGE Scholars	2014-20	LMGT- 1319	Introduction to Business Logistics	Focused	17 UN SDGs with a focus on all 17. Sustainability-focused (Barbier 1987) and Global Citizenship. Student assignments are from the textbook which includes a chapter on sustainability.
Cedar Valley QTIPS	2014-20	LMGT- 1319	Introduction to Business Logistics	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	LMGT- 1321	Introduction to Materials Handling	Focused	17 UN SDGs with a focus on all 17. Sustainability-focused (Barbier 1987) and Global Citizenship. Student assignments are from the textbook which includes a chapter on sustainability with a focus on materials handling regulations and laws for consumer goods like food and electronics or commercial goods like building materials or chemical coatings.
Cedar Valley QTIPS	2014-20	LMGT- 1321	Introduction to Materials Handling	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





North Lake SAGE Scholars	2014-20	LMGT- 1323	Domestic and International Transportation Management	Focused	17 UN SDGs with a focus on all 17. Sustainability-focused (Barbier 1987) and Global Citizenship. Student assignments are from the textbook which includes a chapter on sustainable transportation strategies to optimize fuel efficiency costs for various transport modes such as trucks vs. rail vs. air freight.
Cedar Valley QTIPS	2014-20	LMGT- 1340	Contemporary Logistics Issues	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	LMGT- 1370	Sustainable Logistics	Focused	17 UN SDGs with a focus on all 17. Sustainability-focused (Barbier 1987) and Global Citizenship. Student assignments are from the textbook which is entirely focused on sustainability in logistics and supply chain.
Cedar Valley QTIPS	2014-20	LMGT- 1425	Warehouse and Distribution Center Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	LMGT- 1449	Materials Requirement Plan	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	LMGT- 2330	International Logistics Management	Focused	17 UN SDGs with a focus on all 17. Sustainability-focused (Barbier 1987) and Global Citizenship. Student assignments are focused on the doing business across countries with emphasis on laws and regulation compliance in countries that have sustainability strategies like those in Europe and Asia.
Cedar Valley QTIPS	2014-20	LMGT- 2330	International Logistics Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	LMGT- 2334	Principle of Traffic Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	MATH 2342	Elementary Statistical Methods	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on using sustainability topic data in student assignments.





Brookhaven Sustainability Scholars	2019-20	MATH- 1314	College Algebra	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment includes a reference to the SDGs and real-world applications for math, graphing functions using pollution data.
North Lake SAGE Scholars	2014-20	MATH- 1314	College Algebra	Inclusive	17 UN SDGs with focus on all 17. Sustainability-inclusive (Environment, Society), Global Citizenship and Service Learning. The student assignment is a Curve Fitting Project where students utilize environmental and social data to make a graph and identify a function to represent the data. Environmental and social data in the assignment includes sediment pollution data in the Paluxy River, invasive plant species in Florida, social impact data of domestic cats on an island, and seasonal lake levels in Texas influenced by climate and conservation.
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North Lake SAGE Scholars	2014-20	MATH- 1314	College Algebra	Inclusive	17 UN SDGs with focus on all 17. Sustainability-inclusive (Environment, Society), Global Citizenship and Service Learning. The student assignment is a Curve Fitting Project where students utilize environmental and social data to make a graph and identify a function to represent the data. Environmental and social data in the assignment includes sediment pollution data in the Paluxy River, invasive plant species in Florida, social impact data of domestic cats on an island, and seasonal lake levels in Texas influenced by climate and conservation.
North Lake SAGE Scholars	2014-20	MATH- 1316	Plane Trigonometry	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on using sustainability topic data in student assignments.





Brookhaven Sustainability Scholars	2019-20	MATH- 1324	Mathematics for Business and Social Sciences	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment includes a reference to the SDGs and real-world applications for math, with an emphasis on applications for business and social sciences.
North Lake SAGE Scholars	2014-20	MATH- 1325	Calculus for Business and Social Science	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on using sustainability topic data in student assignments.
North Lake SAGE Scholars	2014-20	MATH- 1325	Calculus for Business and Social Science	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on using sustainability topic data in student assignments.
North Lake SAGE Scholars	2014-20	MATH- 1325	Calculus for Business and Social Science	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on using sustainability topic data in student assignments.
Cedar Valley QTIPS	2014-20	MCHN- 1319	Manufacturing, Materials and Processes	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MCHN- 1326	Introduction to Computer-Aided Manufacturing	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MRKG- 1311	Principles of Marketing	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MRKG- 1381	Cooperative Education in Marketing and Marketing Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MRKG- 2381	Cooperative Education in Marketing and Marketing Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MTRC- 1191	Special Topics in Motorcycle Mechanics and Repair	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Cedar Valley QTIPS	2014-20	MTRC- 1266	Practicum- in Motorcycle Maintenance and Repair	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MTRC- 1402	Motorcycle Tune Up	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MTRC- 1405	Motorcycle Service Principles	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MTRC- 1408	Motorcycle Chassis and Drive Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MTRC- 1419	Motorcycle 4 Stroke Engine and Transmission	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MTRC- 1420	Motorcycle Drive Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MTRC- 1422	Motorcycle Electrical Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MUEN- 2123	Lab Band	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MUEN- 2141	Chorus	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MUSB- 1380	Cooperative Education in Music Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MUSB- 1381	Cooperative Education in Music Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	MUSC- 2141	Forum and Recital	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	MUSI- 1192	Guitar Class I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on sustainable materials used for guitar manufacturing, maintenance, and reuse options for musicians.





Cedar Valley QTIPS	2014-20	MUSI- 1301	Fundamentals of Music I	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	OSHT- 1213	Accident Prevention, Inspection, and Investigation	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on overlapping principles of sustainability and safety as outlined by OSHA, ISO, ANSI and other industry standards.
North Lake SAGE Scholars	2014-20	OSHT- 1307	Construction Site Safety and Health	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on overlapping principles of sustainability and safety as outlined by OSHA, ISO, ANSI and other industry standards.
Cedar Valley QTIPS	2014-20	PHED- 1119	Beginning Weight Training	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	PHED- 1134	Lifetime Fitness & Wellness II	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	PHED- 1164	Introduction to Physical Fitness and Wellness	Focused	17 UN SDGs with a focus on SDG-2: Zero Hunger and SDG-3 Health and Wellbeing. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment includes an overview of basic nutrition and various special diets such as vegan and organic and how students can grow fresh vegetables at home.
Cedar Valley QTIPS	2014-20	PHED- 1164	Lifetime Fitness & Wellness I	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	PHED- 1304	Health for Today	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Cedar Valley QTIPS	2014-20	PHIL- 1301	Introduction to Philosophy	Focused	The Ethics classes will be tackling a unit on Sustainable Farming and the negative effects of our newly industrialized food supply on farmers, animals, and people. Films are shown in class (e.g. Food, Inc.) and recent writings about current issues (e.g. In Defense of Food by Michael Pollan) are examined. In History and Literature of the Bible the Hebrew ideas of the Cultural Mandates and the Stewardship of Creating in Genesis 1:26-28, 2:15 is discussed.
Brookhaven Sustainability Scholars	2019-20	PHIL- 1301	Introduction to Philosophy	Inclusive	17 UN SDGs with focus on SDGs: 3, 5, 6, 10, 14, 15, 16. Sustainability-inclusive (Economy, Society). Online Discussion (one of six discussion topics focused on sustainable environment and sustainable society). Reading Quizzes (two of ten quizzes cover readings related to sustainable environment and sustainable society). Final Exam (25% of exam covers readings related to sustainable environment and sustainable society).
North Lake SAGE Scholars	2014-20	PHIL- 1301	Introduction to Philosophy	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on philosophy and religion reading that highlight sustainability concepts of stewardship, science, and ethics.
North Lake SAGE Scholars	2014-20	PHIL- 1301	Introduction to Philosophy	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on philosophy and religion reading that highlight sustainability concepts of stewardship, science, and ethics.
Cedar Valley QTIPS	2014-20	PHIL- 1317	Survey of World Religions	Focused	The Ethics classes will be tackling a unit on Sustainable Farming and the negative effects of our newly industrialized food supply on farmers, animals, and people. Films are shown in class (e.g. Food, Inc.) and recent writings about current issues (e.g. In Defense of Food by Michael Pollan) are examined. In History and Literature of the Bible the Hebrew ideas of the Cultural Mandates and the Stewardship of Creating in Genesis 1:26-28, 2:15 is discussed.





Cedar Valley QTIPS	2014-20	PHIL- 2306	Introduction to Ethics	Focused	The Ethics classes will be tackling a unit on Sustainable Farming and the negative effects of our newly industrialized food supply on farmers, animals, and people. Films are shown in class (e.g. Food, Inc.) and recent writings about current issues (e.g. In Defense of Food by Michael Pollan) are examined. In History and Literature of the Bible the Hebrew ideas of the Cultural Mandates and the Stewardship of Creating in Genesis 1:26-28, 2:15 is discussed.
Brookhaven Sustainability Scholars	2019-20	PHIL- 2306	Introduction to Ethics	Inclusive	17 UN SDGs with focus on SDGs: 3, 5, 6, 10, 14, 15, 16. Sustainability-inclusive (Economy, Society). Online Discussion (one of six discussion topics focused on sustainable environmental and sustainable society; includes animal ethics, ecological ethics, and environmental justice). Reading Quizzes (two of ten reading quizzes based on readings related to sustainable environmental and sustainable society; includes animal ethics, ecological ethics, and environmental justice). Final Exam (thirty percent of final exam covers reading and lectures related to sustainable environmental and sustainable society; includes animal ethics, ecological ethics, and environmental justice).
North Lake SAGE Scholars	2014-20	PHIL- 2306	Introduction to Ethics	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on philosophy and religion reading that highlight sustainability concepts of environmental ethics.
North Lake SAGE Scholars	2014-20	PHIL- 2306	Introduction to Ethics	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on philosophy and religion reading that highlight sustainability concepts of environmental ethics.





Cedar Valley QTIPS	2014-20	PHIL- 2318	Contemporary Philosophy	Focused	Students complete individual research projects and present their findings on sustainability with water, wind, and solar power, recycling computer parts, organic clothing, electric cars etc. Students are also required to read from the 2010 World Institute on Consumerism to One of Sustainability.
North Lake SAGE Scholars	2014-20	PHYS- 1401	College Physics I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science.
North Lake SAGE Scholars	2014-20	PHYS- 1401	College Physics I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science.
North Lake SAGE Scholars	2014-20	PHYS- 1401	College Physics I		17 UN SDGs with a focus on SDG-6 Clean & Affordable Energy and SDG-9: Industry, Innovation and Infrastructure. Sustainability-focused (Barbier 1987), with Global Citizenship and Service Learning. The student assignment is a Laboratory Report on Sustainable Topics in Energy Production, Conservation of Energy and Efficiency of Devices used in Everyday Life. The assignment is worth 25 points and is paperless submitted online. Students are encouraged to reduce their own energy and water consumption following fundamental principles in physical science and can participate in service learning opportunities on campus or in the community.
North Lake SAGE Scholars	2014-20	PHYS- 1402	College Physics II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science.
North Lake SAGE Scholars	2014-20	PHYS- 1402	College Physics II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science.
North Lake SAGE Scholars	2014-20	PHYS- 1402	College Physics II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science.





North Lake SAGE Scholars	2014-20	PHYS- 1403	Stars and Galaxies	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science, dark sky conservation, and a semester project to make a scaled model of the solar system, stars and galaxies that stretches across the campus. The model is constructed from repurposed cardboard, paper, and paint.
North Lake SAGE Scholars	2014-20	PHYS- 1404	Solar System	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science, dark sky conservation, and a semester project to make a scaled model of the solar system, stars and galaxies that stretches across the campus. The model is constructed from repurposed cardboard, paper, and paint.
North Lake SAGE Scholars	2014-20	PHYS- 2425	University Physics I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science.
North Lake SAGE Scholars	2014-20	PHYS- 2425	University Physics I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science.
North Lake SAGE Scholars	2014-20	PHYS- 2425	University Physics I	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science.
North Lake SAGE Scholars	2014-20	PHYS- 2426	University Physics II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science.
North Lake SAGE Scholars	2014-20	PHYS- 2426	University Physics II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science.





North Lake SAGE Scholars	2014-20	PHYS- 2426	University Physics II	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in physical science.
Cedar Valley QTIPS	2014-20	PHYS- 2426	University Physics II	Inclusive	Students will use solar panels for a house wiring project.
Cedar Valley QTIPS	2014-20	POFT- 1321	Business Math	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	POFT- 2312	Business Correspondence and Communications	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	PSYC- 2301	General Psychology	Focused	17 UN SDGs with focus on SDGs: 1-16. Sustainability-focused (Barbier 1987). Student assignment is cross-listed with SPCH-1311 for a Team Taught Learning Community of PSYC 2301 & SPCH 1311: "The Human Experience". The assignment is titled "Sustainable Community Project," student work in groups of four to five and design a community service project that would provide a solution to one of the many problems that plagues our Dallas/Ft. Worth area. Following individual research, group tasks, and proposal design, students will present their proposal via a group persuasive speech.





Brookhaven Sustainability Scholars	2019-20	PSYC- 2301	General Psychology	Inclusive	17 UN SDGs with focus on SDGs: 2, 5, 10, 11, 16. Sustainability-inclusive (Environment, Society) and Service Learning. Psychology in the Real-World Assignment: Students need to complete a Volunteer Activity on campus or in the community with the Service Learning Program. Requirements include a minimum of 15 volunteer hours and write a reflection paper (with a minimum of 750 words). The paper will consist of a summary and a personal reaction. All students must register with the Service-Learning Program. The student organization advisor/local non-profit must confirm your 15 volunteer hours by the assigned due date. (If you need alternative volunteer opportunities, please contact Professor Hurd for approval before starting any hours.) Each activity has its own due date. Students must select one of the assignments and complete it by the final due date. Academic dishonesty policies will be strictly enforced. This assignment is worth 100 points.
Cedar Valley QTIPS	2014-20	PSYC- 2301	General Psychology	Inclusive	There is a unit of instruction related to economic, social, physical wellbeing. We focus on choices we make as consumers.
North Lake SAGE Scholars	2014-20	PSYC- 2301	General Psychology		17 UN SDGs with focus on SDGs 3, 4, 5, 10, 11, 12, 16, 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignment is "My Generosity Project" worth 100 points, approximately 20% of overall course grade. Students are required to implement a creative and meaningful act of generosity and kindness that benefits others and submit an essay describing their experience. Students are encouraged to investigate other philanthropic or charitable events already taking place, in order to help them decide how to follow through with their own project.





Brookhaven Sustainability Scholars	2019-20	PSYC- 2314	Lifespan Growth and Development	Inclusive	17 UN SDGs with focus on SDGs: 2, 3, 5, 10, 11, 16. Sustainability-inclusive (Environment, Society) and Service Learning. Psychology in the Real-World Assignment: Students need to complete a Volunteer Activity on campus or in the community with the Service Learning Program. Requirements include a minimum of 15 volunteer hours and write a reflection paper (with a minimum of 750 words). The paper will consist of a summary and a personal reaction. All students must register with the Service-Learning Program. The student organization advisor/local non-profit must confirm your 15 volunteer hours by the assigned due date. (If you need alternative volunteer opportunities, please contact Professor Hurd for approval before starting any hours.) Each activity has its own due date. Students must select one of the assignments and complete it by the final due date. Academic dishonesty policies will be strictly enforced. This assignment is worth 100 points.
North Lake SAGE Scholars	2014-20	PSYC- 2314	Lifespan Growth and Development	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in psychology.
North Lake SAGE Scholars	2014-20	PSYC- 2315	Psychology of Adjustment	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in psychology.
North Lake SAGE Scholars	2014-20	PSYC- 2316	Psychology of Personality	Inclusive	The three areas of sustainability are introduced; economy, environment, and society with a focus on introductory sustainability concepts in psychology.
Cedar Valley QTIPS	2014-20	QCTC- 1301	Total Quality Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RBPT- 1300	Fundamentals of Residential Building Science	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Cedar Valley QTIPS	2014-20	RBPT- 1305	Residential Light Applications for Plug Loads	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RBPT- 1310	Residential Mechanical Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RBPT- 2320	Residential Energy Conservation Codes	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RBPT- 2325	Energy Rating Systems for Homes	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RBPT- 2329	Residential Building Verification and Rating	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RBPT- 2330	Advanced Residential Building Science and Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RBPT- 2335	Residential Environmental Quality	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RBPT- 2340	Advanced Residential Mechanical Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RBPT- 2345	Onsite Power Generation and Renewable Energy	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RBPT- 2350	Residential Retrofit Strategies	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RBPT- 2355	Sustainable Neighborhood Development	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RBPT- 2359	Residential Building Performance Consulting	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1191	Special Topics in Real Estate	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Cedar Valley QTIPS	2014-20	RELE- 1200	Contract Forms and Addenda	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1300	Contract Forms and Addenda	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1301	Principles of Real Estate	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1303	Real Estate Appraisal	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1307	Real Estate Investments	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1309	Real Estate Law	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1311	Law of Contracts	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1315	Property Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1319	Real Estate Finance	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1321	Real Estate Marketing	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1323	Real Estate Computer Applications	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1325	Real Estate Mathematics	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 1338	Principles of Real Estate	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 2301	Law of Agency	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	RELE- 2331	Real Estate Brokerage	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Cedar Valley QTIPS	2014-20	RELE- 2388	Internship Real Estate	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	RTVB- 1421	TV/Video Field Production	Inclusive	Video field camera set up and operation for broadcast and digital media. Incorporates basic editing and field audio techniques. Student assignments have included producing video on RecycleMania, Tree Higher Education Campus USA, College Renewable Energy Goals, and local sustainability projects in Irving and Dallas.
North Lake SAGE Scholars	2014-20	RTVB- 2282	Cooperative Education in Radio and Television Broadcasting Technology	Inclusive	Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. Student assignments have included specializations in social sustainability and environmental sustainability.
Cedar Valley QTIPS	2014-20	RTVB- 2343	Commercial Recording Techniques	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	SCIT- 1407	Applied Human Anatomy and Physiology I	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Brookhaven Sustainability Scholars	2019-20	SCIT- 1408 / BIOL- 2402	Anatomy and Physiology II	Focused	17 UN SDGs with focus on all SDG-3: Health & Wellbeing. Sustainability-focused (Barbier 1987) and Global Citizenship. Students to complete a semester long project discussing sustainability of the body systems by a video/PPT presentation highlighting the majority, if not all, the topics pertaining to sustainability.
Cedar Valley QTIPS	2014-20	SMER- 1191	Spec Topic in Small Engine Mechanics and Repair	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Cedar Valley QTIPS	2014-20	SMER- 1266	Practicum in Small Engine Mechanics and Repair	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	SMER- 1401	Marine Engine Tune-Up	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	SMER- 1404	Marine Equipment Service Principles	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	SMER- 1407	Marine Engine Overhaul	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	SMER- 1410	Marine Drive Units	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	SMER- 1413	Marine Electrical Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	SMER- 1425	Small Engine Electrical System	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	SMER- 1428	Small Engine Service Principles	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	SMER- 1431	Small Engine Tune Up	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	SMER- 1437	Small Engine 4 Stroke Engines and Transmissions	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	SMER- 1438	Small Engine Drive Systems	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





Brookhaven Sustainability Scholars	2019-20	SOCI- 1301	Introduction to Sociology	Inclusive	17 UN SDGs with focus on SDGs: 1, 2, 3. Sustainability inclusive (Economy, Society). Student assignment is a Research Project: Food and Class. Students will learn about social class through an examination of food production, access and consumption. The assignment is divided into two parts. Part A consists of a written analysis of the 2008 film Food Inc. Part B will involve students selecting 1 of 3 options to conduct research on food Option 1: Survey Research: Guided by the instructor, students will administer and analyze a questionnaire (including write-up) about food choices. Option B: Students will engage in a secondary data analysis (namely, a review of literature) of research on the sociology of food. Option C: students will complete two participant observations of a local farmer's markets with a required analysis/write-up.
North Lake SAGE Scholars	2014-20	SOCI- 1301	Introduction to Sociology	Inclusive	17 UN SDGs with focus on all 17. Sustainability-inclusive (Environment, Society), Global Citizenship and Service Learning. Student assignment focuses on a Sustainable Society by examining the Global Goals for Sustainable Development. This assignment includes three parts: 1) reviewing the 17 UN Global Goals for Sustainable Development, 2) creating a campus activity for NLC that addresses one or more of the goals, and 3) sharing/discussing the activity with students via the discussion board in eCampus. This assignment is worth 15% of the overall course grade.
North Lake SAGE Scholars	2014-20	SOCI- 1306	Social Problems	Inclusive	17 UN SDGs with focus on all 17. Sustainability-inclusive (Environment, Society), Global Citizenship and Service Learning. Application of sociological principles and theoretical perspectives to major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems.





Section 1-10-2					
Cedar Valley QTIPS	2014-20	SOCI- 1306	Social Problems	Inclusive	A social issues course where problems such as poverty, crime, healthcare, and others are examined from a sociological perspective. The course will look at issues of poverty and crime, but most of the semester will be spent examining the issue of environment and its effect on communities. The course has two-fold agenda: (1) to educate the students about the most important issue affecting the planet and learn that the worst affected people oar the poor. (2) To advocate for change – students will work on projects which will include service-learning, importance of growing one's own food, contacting local officials on this issue, and aspects of social justice.
North Lake SAGE Scholars	2014-20	SOCI- 2319	Minority Studies	Inclusive	17 UN SDGs with focus on all 17. Sustainability-inclusive (Environment, Society), Global Citizenship and Service Learning. This course studies minority-majority group relations, addressing their historical, cultural, social, economic, and institutional development in the United States. Both sociological and social psychological levels of analysis will be employed to discuss issues including experiences of minority groups within the context of their cultural heritage and tradition, as well as that of the dominant culture. Core concepts to be examined include (but are not limited to) social inequality, dominance/subordination, prejudice, and discrimination. Particular minority groups discussed may include those based on poverty, race/ethnicity, gender, sexual orientation, age, disability, or religion.
North Lake SAGE Scholars	2014-20	SPAN- 1411	Beginning Spanish I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignments include sustainability in Spanish, 'sustentabilidad,' and students are encourage to participate in campus events like the annual Earth Day Celebration.





North Lake SAGE Scholars	2014-20	SPAN- 1412	Beginning Spanish II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignments include sustainability in Spanish, 'sustentabilidad,' and students are encourage to participate in campus events like the annual Earth Day Celebration.
Cedar Valley QTIPS	2014-20	SPAN- 1412	Beginning Spanish II	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	SPAN- 2311	Intermediate Spanish I	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignments include sustainability in Spanish, 'sustentabilidad,' and students are encourage to participate in campus events like the annual Earth Day Celebration.
North Lake SAGE Scholars	2014-20	SPAN- 2312	Intermediate Spanish II	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignments include sustainability in Spanish, 'sustentabilidad,' and students are encourage to participate in campus events like the annual Earth Day Celebration.
Cedar Valley QTIPS	2014-20	SPAN- 2312	Intermediate Spanish II	Inclusive	Students explore environmental problems affecting the city of Dallas. Students are asked to research possible solutions. Students are then required to create a PowerPoint Presentation to present their findings to the class.
Brookhaven Sustainability Scholars	2019-20	SPCH- 1311	Introduction to Speech Communications	Focused	17 UN SDGs with focus on SDGs: 1-16. Sustainability-focused (Barbier 1987). Student assignment is cross-listed with SPCH-1311 for a Team Taught Learning Community of PSYC 2301 & SPCH 1311: "The Human Experience". The assignment is titled "Sustainable Community Project," student work in groups of four to five and design a community service project that would provide a solution to one of the many problems that plagues our Dallas/Ft. Worth area. Following individual research, group tasks, and proposal design, students will present their proposal via a group persuasive speech.





North Lake SAGE Scholars	2014-20	SPCH- 1311	Introduction to Speech Communications	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignments include all areas of sustainability: economy, environment, and society.
North Lake SAGE Scholars	2014-20	SPCH- 1311	Introduction to Speech Communications	Inclusive	17 UN SDGs with focus on all 17. Sustainability-inclusive (Environment, Society), Global Citizenship and Service Learning. Student individual assignment is a Journal for Introduction worth 350 points, which is approximately 35% of course grade. Students are asked to write about sustainability topics they identify with and reference reputable academic sources. Student group assignment is a Group Speech on Environmental Concerns, Economic Issues, and/or Wellbeing referring reputable academic sources. The group assignment is worth 150 points or 15% of overall course grade.
North Lake SAGE Scholars	2014-20	SPCH- 1311	Introduction to Speech Communications	Inclusive	17 UN SDGs with focus on all 17. Sustainability-inclusive (Economic, Society), Global Citizenship and Service Learning. Student individual assignment is called "Pay It Forward" and is worth 20% of overall course grade. Students will watch the movie "Pay It Forward" and participate in classroom discussion regarding topics of social sustainability and community engagement, including discussing their opportunity to be of service and influence others through the application of communications concepts and principles.





North Lake SAGE Scholars	2014-20	SPCH- 1311	Introduction to Speech Communications	Inclusive	17 UN SDGs with focus on all SDG-6: Clean Water & Sanitation and SDG-12: Responsible Consumption & Production. Sustainability-inclusive (Environment, Society), Global Citizenship and Service Learning. Student assignment is a group presentation informing their peers on the importance of Water Conservation or Water Pollution Prevention. They must narrow down their topic, research it, and give a written outline, a speech, and a Power Point. They receive extra credit for developing a 30 second video Public Service Announcement, which can be entered into a film festival in Austin, Texas.
Cedar Valley QTIPS	2014-20	SPCH- 1311	Introduction to Speech Communications	Inclusive	Students think about cultural sensitivity and stereotypes when developing speeches. It is important that students understand not only their own, but the cultural differences of others too. Intentional conversation of non-verbal messages we send about our values through how we treat the environment. Students discuss environmental issues relative to outlines for speeches. We do not use handouts and encourage the use of Skype for meetings saving money on gas etc. Tests are all completed online in an effort to go paperless. Informative speeches are assigned with topics relative to sustainability.
North Lake SAGE Scholars	2014-20	SPCH- 1315	Public Speaking	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student individual assignment is called the Ethical Dilemma Discussion worth 5% of overall course grade. Students are asked to consider social ethics and environmental ethics in response to a prompt regarding advertising's role in rising materialisms, childhood obesity, waste of resources and products. Students must reference reputable academic sources.





North Lake SAGE Scholars	2014-20	SPCH- 1315	Public Speaking	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignments include all areas of sustainability: economy, environment, and society.
North Lake SAGE Scholars	2014-20	SPCH- 1315	Public Speaking	Inclusive	17 UN SDGs with focus on all 17. Sustainability-inclusive (Environment, Society), Global Citizenship and Service Learning. Student individual assignment is a Journal for Introduction worth 350 points, which is approximately 35% of course grade. Students are asked to write about sustainability topics they identify with and reference reputable academic sources. Student group assignment is a Group Speech on Environmental Concerns, Economic Issues, and/or Wellbeing referring reputable academic sources. The group assignment is worth 150 points or 15% of overall course grade.
Cedar Valley QTIPS	2014-20	SPCH- 1315	Public Speaking	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
North Lake SAGE Scholars	2014-20	SPCH- 1321	Business and Professional Communication	Focused	17 UN SDGs with focus on all 17. Sustainability-focused (Barbier 1987), Global Citizenship and Service Learning. Student assignments include all areas of sustainability: economy, environment, and society.
North Lake SAGE Scholars	2014-20	SPCH- 1321	Business and Professional Communication	Inclusive	17 UN SDGs with focus on all 17. Sustainability-inclusive (Environment, Society), Global Citizenship and Service Learning. Student individual assignment is a Journal for Introduction worth 350 points, which is approximately 35% of course grade. Students are asked to write about sustainability topics they identify with and reference reputable academic sources. Student group assignment is a Group Speech on Environmental Concerns, Economic Issues, and/or Wellbeing referring reputable academic sources. The group assignment is worth 150 points or 15% of overall course grade.





Cedar Valley QTIPS	2014-20	VTHT- 1217	Veterinary Office Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	VTHT- 1301	Introduction to Veterinary Technology	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	VTHT- 2209	Food Animal Clinical Management	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	VTHT- 2223	Veterinary Clinical Path I	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.
Cedar Valley QTIPS	2014-20	VTHT- 2439	Veterinary Nursing Care	Inclusive	The three areas of sustainability are introduced in the course; economy, environment, and society.





ABDR	1303	An introduction to the collision repair industry with emphasis on safety, professionalism, and vehicle structural design.	WECM	Air
ABDR	1455	Demonstrate sheet metal repair skills using mechanical and hydraulic equipment. Emphasis on attachment devices used to straighten and align exterior body panels.	WECM	Air
ABDR	2357	A study of methods and equipment used in state of the art repair shops to improve management functions and profitably.	WECM	Air
ABDR	2402	Instruction in the repair, replacement, and/or service of those mechanical or electrical systems that are subject to damage from a collision. Topics include drive train removal, reinstallation and service; cooling system service; cooling system service and repair; exhaust system service; and emission control systems. Additional topics include wire and connector repair, reading wiring diagrams, and troubleshooting.	WECM	Air, emission, CO2 emission
ABDR	2541	Instruction in preparation of vehicles for major repair processes. Covers interpreting information from damage reports, planning repair sequences, selecting appropriate tools, and organizing removed parts for reinstallation.	WECM	Air, planning





ABDR	2380	Career related activities encountered in the area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	cooperation
ABDR	2388	A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.	WECM	enable
ABDR	1359	A study of the basic shaping techniques required for fabricating sheet metal parts and pieces. Discussion will include custom cars and street rods.	WECM	Metals
ABDR	1307	A study of collision repair welding and cutting procedures.	WECM	
ABDR	1419	Covers metal principles and working techniques including proper tool usage and product application.	WECM	
ABDR	1431	An introduction to current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Emphasis on surface preparation, masking techniques, and refinishing of replacement parts.	WECM	
ABDR	1458	Training in mixing and spraying of automotive topcoats. Emphasis on formula ingredient, reducing, thinning, and special spraying techniques. Introduction to partial panel refinishing techniques and current industry paint removal techniques.	WECM	
ABDR	2353	Advanced course in color theory, analysis, tinting, and advanced blending techniques for acceptable paint matching.	WECM	





ABDR	2355	An advanced course in collision estimating and development of an accurate damage report.	WECM	
ABDR	2359	Skill development in the practical application of welded panel replacement and structural sectioning procedures as well as practical equipment applications in structural vehicle straightening, alignment, welding, and corrosion protection.	WECM	
ABDR	2537	Operation of equipment and the procedures involved in the repair of body structures. Special emphasis on conducting a thorough damage analysis as well as demonstrating proper pulling and anchoring techniques.	WECM	
ACCT	2301	This course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) as applied to transactions and events that affect business organizations. Students will examine the procedures and systems to accumulate, analyze, measure, and record financial transactions. Students will use recorded financial information to prepare a balance sheet, income statement, statement of cash flows, and statement of shareholders' equity to communicate the business entity's results of operations and financial position to users of financial information who are external to the company. Students will study the nature of assets, liabilities, and owners' equity while learning to use reported financial information for purposes of making decisions about the company. Students will be exposed to International Financial Reporting Standards (IFRS).	ACGM	equity, events





ACCT	2302	This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing methodologies, cost behavior, operational and capital budgeting, and performance evaluation.	ACGM	planning
ACNT	1371	Legal concepts underlying sale of goods; commercial paper; securities interests, securities regulation, accountants' malpractice, negotiable instruments and bankruptcy; application of the Uniform Commercial Code and preparation for the CPA examination. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as a business-related course for the uniform Texas CPA exam.	WECM	bribery





ACNT	2339	Advanced level of external auditing issues and practice. The focus is on current issues facing the auditing professions with emphasis on the challenges facing the audit practitioner in the foreseeable future. Emerging issues in auditing are identified and analyzed using audit concepts. Topics may include auditing theory and research, economic function of audits, professional standards, malpractice, securities regulation, statistical sampling and computerized auditing. Cases, readings, individual research and discussion. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upperdivision course and satisfy the required research component for the uniform Texas CPA exam.	WECM	economic, future
ACNT	2371	Legal, institutional and economic implications of being a U.S. public company. An examination of the interrelationships between accounting and government with particular emphasis on the effects of SEC regulations on accounting practices and reporting. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper division accounting course for the uniform Texas CPA exam.	WECM	economic, Institutions, legitimate institution





ACNT	2345	Examination and application of effective written business and accounting communications. The course may also be offered for qualifying education credit for the CPA examinations by Texas Community Colleges that meet Texas State Board of Public Accountancy standards. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as a business-related course for the uniform Texas CPA exam.	WECM	Education, effective
ACNT	1335	Introduction to professional ethics in the accounting and business environments. This course may also be offered for qualifying education credit for CPA examination by Texas community colleges that meet Texas State Board of Public Accountancy standards. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an approved accounting ethics course for the uniform Texas CPA exam.	WECM	Education, environment
ACNT	2373	Forensic accountants serve a variety of clients in a variety of roles. This course will explore these different roles whether as a consultant or expert, working for the plaintiff, defense or a regulator. In addition, the course will address issues confronted by the expert in developing and issuing an expert report. Other topics include the preparation and presentation methods needed to effective present both direct testimony and cross-examination and to enable the expert to withstand challenges from opposing counsel. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an accounting business-related course for the uniform Texas CPA exam.	WECM	effective, enable





ACNT	1303	A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll.	WECM	environment, pay
ACNT	1304	A study of accounting for merchandising, notes payable, notes receivable, valuation of receivables and equipment, and valuation of inventories in a manual and computerized environment.	WECM	environment, pay
ACNT	1329	A study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment.	WECM	environment, pay
ACNT	1375	Forensic accountants serve in a variety of non-traditional capacities. The class will be based on real-world case studies. The course provides students with an understanding of different types of engagements, how investigative teams work and investigative methods and techniques used when performing financial statement investigations. Additionally, the course will highlight the many common types of financial reporting manipulations that frequently occur historically and in today's environment that includes an overview of current accounting topics that are often susceptible to manipulations and recurring financial statement fraud. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper division accounting course for the uniform Texas CPA exam.	WECM	environment, world, traditional knowledge





ACNT	1374	A study of financial reporting and disclosure issues with an emphasis on the use of corporate financial statements and their accompany footnotes. Continuation of ACNT 1373 and includes coverage of accounting for investments, equity, accounting for income taxes, derivatives, accounting changes, statement of cash flows, earnings per share and full disclosure. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper division accounting course for the uniform Texas CPA exam.	WECM	equity
ACNT	2336	Financial statement analysis from a decision-maker perspective. Analysis of corporate financial reports from a decision-maker's perspective. Applications included credit analysis, equity valuation and financial distress, including the construction of financial statements, the meaning of accounts, ratios and other evaluation indices. The course is case-and-applications-oriented. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper-division course for the uniform Texas CPA exam.	WECM	equity
ACNT	1340	Ethical standards and behaviors, codes of professional conduct, and the impact of unethical behavior on an individual, business and society.	WECM	ethical





1990				
ACNT	2372	Comprehensive presentation of common financial challenges and problems found in divorce engagements. Course will cover community property, separate property, and management of family law case, tracing, business valuation and division of property. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as a business-related course for the uniform Texas CPA exam.	WECM	family
ACNT	2337	An examination of the aspects of accounting that applies to multinational businesses. IFRS is an examination of the aspects of accounting that apply to multinational business and to practice outside the United States. Topics included in the course are: patterns of accounting practice in other nations, the promulgation of international accounting standards and the harmonization of standards; accounting problems associated with multinational operations; and a comparison of auditing, corporate governance and regulation issues around the world. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper-division course for the uniform Texas CPA exam.	WECM	governance, world
ACNT	1279	Introduction to taxation of decedents' estates and lifetime gifts; valuation of property subject to estate and gift taxes. Federal taxation of flow-through entities, including; partnerships and limited and liability partnerships (LLPs). This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper division accounting course for the uniform Texas CPA exam.	WECM	partner, multi-stakeholder partnerships





ACNT	1347	A study of federal tax laws for preparation of partnership and corporate returns.	WECM	partner, multi-stakeholder partnerships
ACNT	2379	Study of accounting for mergers and acquisitions for GAAP and IFRS, the development of consolidated financial statements and related reorganization issues. Topics also include accounting for partnerships, financial instruments and bankruptcy. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper division accounting course for the uniform Texas CPA exam.	WECM	partner, multi-stakeholder partnerships
ACNT	1277	Federal income tax concepts relating to individuals and sole proprietorships. Topics include understanding the appreciation of basic tax concepts and their application of tax law in areas of compensation planning, investment planning, tax shelters and current developments relating to the individual taxpayer. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper division accounting course for the uniform Texas CPA exam.	WECM	pay, planning





ACNT	1372	Technical accounting theory and principles of the balance sheet, income statement and cash flow statement issued from the perspective of the preparer of corporate financial reports. Topics also include the conceptual framework of accounting and time value of money. Understanding of decision-making uses of accounting information; product costing, profit planning and standard cost analysis. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. The course is an introductory level course.	WECM	planning, debt relief, debt restructuring
ACNT	2332	A study of accounting information systems and related subsystems, including data collection, security, retrieval, manipulation, filtering and sorting of data.	WECM	security
ACNT	1376	Introduction to the accounting process of non-profit organizations with emphasis on FASB 116 and 117 and OMB Circular 133. Topics include budgeting, revenue sources, revenue projections, audits, taxation – including the preparation of a 990 tax return, information technology, audit committees and other topics which affect non-profit accounting. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper division accounting course for the uniform Texas CPA exam.	WECM	technology





ACNT	2377	The course is designed to provide the financial statement auditor with an understanding of the information technology process along with the technical aspects of controls and control testing in an information technology. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper division accounting course for the uniform Texas CPA exam.	WECM	technology
ACNT	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ACNT	1393	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ACNT	1278	Concepts and principles governing the taxation of corporations and their shareholders; the effect of taxes on corporate formation, capital structure, distributions and liquidations. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper division accounting course for the uniform Texas CPA exam.	WECM	
ACNT	1305	Accounting fraud and examination designed to provide a basic understanding of the impact that fraud has on an organization.	WECM	
ACNT	1311	Introduction to utilizing the computer in maintaining accounting records with primary emphasis on a general ledger package.	WECM	





ACNT	1313	Use of the computer to develop and maintain accounting records and to process common business applications for managerial decision-making.	WECM
ACNT	1331	A study of the federal tax law for preparation of individual income tax returns.	WECM
ACNT	1373	A study of financial reporting and disclosure issues with an emphasis on the use of corporate financial statements and their accompany footnotes. Covers the theoretical structure of financial accounting, required financial statements, revenue recognition, operating assets, current liabilities and long-term liabilities. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper division accounting course for the uniform Texas CPA exam.	WECM
ACNT	1380	Career-related activities encountered in the area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM
ACNT	1431	A study of the federal tax law for preparation of individual income tax returns.	WECM
ACNT	2302	Allows students to apply broad knowledge of the accounting profession through discipline specific projects involving the integration of individuals and teams performing activities to simulate workplace situations.	WECM
ACNT	2303	Analysis of generally accepted accounting principles, concepts, and theory underlying the preparation of financial statements.	WECM





ACNT	2304	Continued in-depth analysis of generally accepted accounting principles underlying the preparation of financial statements, including comparative analysis and statement of cash flows.	WECM	
ACNT	2309	Budgeting, cost analysis and cost control systems using traditional and contemporary costing methods and theories in decision making.	WECM	
ACNT	2311	Practical applications of accounting with emphasis on cost behavior, capital management decisions, budgeting, and financial statement analysis.	WECM	
ACNT	2330	A study of basic fund accounting and financial reporting concepts for governmental and not-for-profit entities.	WECM	
ACNT	2331	Internal controls, auditing standards and processes used by internal auditors, managers, and independent public accountants.	WECM	
ACNT	2333	Methods of measuring and communicating financial information with emphasis on consolidated statements and other complex business transactions.	WECM	
ACNT	2341	Topics include internal audit standards, internal controls, risk assessment, evidence, documentation and communications. Auditing techniques including sampling and use of systems-based audit techniques. Review of ethics, emerging issues and industry specific matters. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper-division course for the uniform Texas CPA exam.	WECM	





ACNT	2343	Analysis of Generally Accepted Accounting Principles (GAAP) and a detailed review of Financial Accounting Standards, including the theoretical foundations of GAAP. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper-division course for the uniform Texas CPA exam.	WECM	
ACNT	2347	The course is designed to give accounting majors exposure to and appreciation of various types of research that are undertaken by accounting and auditing professionals, including CPA's, tax professionals, financial analysts and academics. Account research will be studied as it relates to financial accounting standards, auditing, governmental accounting and gaining understanding of a business and industry, tax research and academic research. Students will gain experience working with professional accounting and tax research databases as well as other databases that are useful for accounting research. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper-division course and satisfy the required research component for the uniform Texas CPA exam.	WECM	





ACNT	2370	In-depth study of methods used by managers for decision-making, budgeting and performance evaluation. Emphasizes cost accounting systems and procedures for data accumulation and cost control. Issues related to the design, control and implementation of accounting information systems. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper division accounting course for the uniform Texas CPA exam.	WECM	
ACNT	2374	An introduction to the accounting principles and reporting practices of government organizations on the state and local level. Topics include the fund and governmental financial reporting model, government financial wide statement reporting, the preparation of fund and government-wide financial statements, footnote disclosures and management discussion and analysis. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an accounting course for the uniform Texas CPA exam.	WECM	





ACNT	2375	The objective of this course is to provide a framework for business valuation using financial accounting information. To attain the objective, the course will rely on 'fundamental analysis', which implies the use of financial reports and other relevant information to produce pro-forma financial statements and then use them to estimate a value for the business. Topics include advanced issues in accounting, earnings quality, performance measurement, cash flows and accounting-based valuation and trading strategies. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an upper division accounting course for the uniform Texas CPA exam.	WECM	
ACNT	2376	This course will provide the student with an overview of the law related to damages and valuates of closely held businesses or assets that have no clearly established market valuation. The student will study various techniques available to determine forensic damages and forensic valuation. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an accounting business-related course for the uniform Texas CPA exam.	WECM	
ACNT	2378	Exploration of the necessary skills and knowledge needed to offer services in assurance, attestation or auditing engagements. The main focus is the process used by external auditors to conduct financial statement audits. This course is for students who possess a Bachelor's degree and is part of the Certificate in Professional Accountancy. It may qualify as an accounting course for the uniform Texas CPA exam.	WECM	





ACNT	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ACNT	2403	Analysis of generally accepted accounting principles, concepts, and theory underlying the preparation of financial statements.	WECM	
ACNT	2404	Continued in-depth analysis of generally accepted accounting principles underlying the preparation of financial statements, including comparative analysis and statement of cash flows.	WECM	
AGRI	1407	Principles and practices in the development, production, and management of field crops including growth and development, climate, plant requirements, pest management, and production methods. Laboratory activities will reinforce the fundamental principles and practices in the development, production, and management of field crops including growth and development, climate, plant requirements, pest management, and production methods.	ACGM	climate change, climate-related
AGRI	2330	Principles and practices used in the production and improvement of wildlife resources. Aesthetic, ecological, and recreational uses of public and private lands.	ACGM	ecological
AGRI	2317	An introduction to the field of agricultural economics as it relates to production, consumption, marketing, prices, supply and demand, records and finance. Course will cover fundamental economic principles and their application in the agricultural industry.	ACGM	economic, material consumption, material sufficiency, microfinance





AGRI	1415	Structure, growth, and development of horticultural plants. Examination of environmental effects, basic principles of reproduction, production methods ranging from outdoor to controlled climates, nutrition, and pest management. Laboratory activities will reinforce these concepts.	ACGM	environment, climate-related
AGRI	1329	Biological and scientific aspects of modern industrial food supply systems. Food classification, modern processing, nutritional quality, and quality control.	ACGM	Food
AGRI	1419	Scientific animal production and the importance of livestock and meat industries. Selection, reproduction, nutrition, management, and marketing of livestock. Laboratory activities will reinforce these concepts.	ACGM	industries, undernourishment
AGRI	1131	Overview of agriculture and the American agricultural system, including an examination of career opportunities and requirements.	ACGM	opportunities
AGRI	1309	Survey of the use of computers in agricultural applications including the use of word processing, spreadsheets, presentations, and communication software for agricultural purposes.	ACGM	
ANTH	2302	The study of the human past through material remains. The course includes a discussion of methods and theories relevant to archeological inquiry. Topics may include the adoption of agriculture, response to environmental change, the emergence of complex societies, and ethics in the discipline.	ACGM	environment





ANTH	2401	The study of human origins and bio-cultural adaptations. Topics may include primatology, genetics, human variation, forensics, health, and ethics in the discipline. This lecture and laboratory course combines all the elements of ANTH 2301 and ANTH 2101, which includes demonstrations of major principles and learning outcomes listed for both courses.	ACGM	Genetics, climate adaptation, climate-related
ANTH	2351	The study of human cultures. Topics may include social organization, institutions, diversity, interactions between human groups, and ethics in the discipline.	ACGM	Institutions, diversity, living beings
ANTH	2389	An instructional program designed to integrate on-campus study with practical hands-on experience in Anthropology. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions.	ACGM	Institutions, legitimate institution, living beings
ANTH	2346	The study of human beings, their antecedents, related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archeology, linguistics, their applications, and ethics in the discipline.	ACGM	Institutions, living beings
ARAB	1311	This is the first semester of academic transfer Arabic. It is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented.	ACGM	





ARAB	1411	This is the first semester of academic transfer Arabic. This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented.	ACGM	
ARAB	1412	This is the second semester of academic transfer Arabic. This course continues the oral practice, reading, writing, grammar and cultural studies begun in ARAB 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax.	ACGM	
ARAB	2311	This is the third semester of academic transfer Arabic. This course is designed to further develop students; overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded.	ACGM	
ARAB	2312	This is the fourth semester of academic transfer Arabic. This course is a continuation of ARAB 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture.	ACGM	
ARCE	1421	Architectural drawing and sketching. Emphasizes freehand drawing, perspectives, delineation in various media, and development of students; graphical expression. Includes an introduction to various reproduction methods.	WECM	expression, expression





ARCE	1303	Properties, specifications, vendor references, and uses of materials as related to architectural systems of structures.	WECM	
ARCE	1452	A study of structural systems including concrete foundations and frames, wood framing and trusses, and structural steel framing systems. Includes detailing of concrete, wood, and steel to meet industry standards including the American Institute of Steel Construction and The American Concrete Institute.	WECM	
ARCE	2352	The properties of building materials (assemblies), specifications, codes, vendor references, and uses of mechanical, plumbing, conveying, and electrical systems as they relate to architecture for residential and commercial construction.	WECM	
ARCH	1304	This course is a continuation of Architecture 1303, with emphasis upon architecture theories, perceptions, environmental factors and communication of those elements in design.	ACGM	environment
ARCH	2312	The nature and use of materials in construction are explored. Emphasis is placed upon appropriateness and use in design as they relate to design expression and codes.	ACGM	expression
ARCH	1311	This course is an introduction to the elements of architecture; opportunities within the architectural profession are explored.	ACGM	opportunities
ARCH	1301	The architectural contributions of Ancient, Classical, Medieval, and Renaissance societies are surveyed, along with their relationships to the cultural heritage of the Western World.	ACGM	world, cultural heritage





ARCH	1302	The evolution of 20 th Century design theory is surveyed, from the Industrial Revolution to the present. Special attention is given to significant architects, designers, and personalities and their effect on the modern movement.	ACGM	
ARCH	1303	Basic concepts of design are studied including form, scale, proportion, rhythm, unity, accent, texture, and pattern, as applied to two-dimensional and three-dimensional abstract projects.	ACGM	
ARCH	1305	Visual experiences in the aesthetics of architecture are studied in context with architecture as a contemporary philosophical concept.	ACGM	
ARCH	1307	Basic architectural drafting techniques are studied including orthographic projection and isometric drawing. Linework in pencil and ink are emphasized.	ACGM	
ARCH	1308	Three-dimensional drawing utilizing perspective and shade/shadow theory is studied in pencil and ink.	ACGM	
ARCH	1315	Basic computer terminology and software applications utilizing the microcomputer in architecture and design are studied.	ACGM	
ARCH	2301	Representational drawing is studied with emphasis upon eye-to-hand coordination utilizing light, shade, line, and tonal quality. Pencil media is utilized.	ACGM	
ARCH	2302	Representational drawing is continued using a variety of techniques in pen and ink media.	ACGM	
ARTC	2311	Survey of the evolution of graphic arts as it relates to the history of art. Topics include formal, stylistic, social, political, economic, and historical aspects. Emphasis on the art movement, schools of thought, individuals, and technology as they interrelate with graphic arts.	WECM	economic, technology





ARTC	1359	Visual design elements as they relate to new media. Emphasizes aesthetics and visual problem solving such as typographic issues, color management, hierarchy of information, image optimization, and effective layout.	WECM	effective
ARTC	1459	Visual design elements as they relate to new media. Emphasizes aesthetics and visual problem solving such as typographic issues, color management, hierarchy of information, image optimization, and effective layout.	WECM	effective
ARTC	2388	A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. An internship may be a paid or unpaid learning experience.	WECM	enable
ARTC	2313	Includes layout procedures from thumbnails and roughs to final comprehensive and print output. Emphasis on design principles for the creation of advertising and publishing materials, and techniques for efficient planning and documenting projects.	WECM	planning
ARTC	1194	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ARTC	1294	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ARTC	1391	Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events





ARTC	1392	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ARTC	1394	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ARTC	1494	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ARTC	1302	Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image-acquisitions.	WECM	
ARTC	1305	Graphic design with emphasis on the visual communication design process. Topics include basic terminology and graphic design principles.	WECM	
ARTC	1309	Introduction to drawing techniques as they pertain to the commercial illustration industry.	WECM	
ARTC	1313	The fundamentals of using digital layout as a primary publishing tool and the basic concepts and terminology associated with typography and page layout.	WECM	
ARTC	1317	Study of design development relating to graphic design terminology, tools and media, and layout and design concepts. Topics include integration of type, images and other design elements, and developing computer skills in industry standard computer programs.	WECM	





ARTC	1325	A survey of computer design concepts, terminology, processes, and procedures. Topics include computer graphics hardware, electronic images, electronic publishing, vector-based graphics, and interactive multimedia.	WECM	
ARTC	1327	A study of letterforms and typographic concepts as elements of graphic communication. Emphasis on developing a current, practical typographic knowledge based on industry standards.	WECM	
ARTC	1349	Creation of projects in art direction for advertising graphic campaigns for products, services, or ideas. Topics include all campaign procedures from initial research and creative strategy to final execution and presentation of a comprehensive project.	WECM	
ARTC	1353	Use of the tools and transformation options of an industry- standard vector drawing program to create complex illustrations or drawings.	WECM	
ARTC	1402	Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image-acquisitions.	WECM	
ARTC	1425	A survey of computer design concepts, terminology, processes, and procedures. Topics include computer graphics hardware, electronic images, electronic publishing, vector-based graphics, and interactive multimedia.	WECM	
ARTC	2305	Principles of digital image processing and electronic painting. Emphasis on bitmapped- or raster-based image marking and the creative aspects of electronic illustration for commercial and fine art applications.	WECM	





ARTC	2317	Exploration of typographic design including computer generated letterforms as elements of design. Includes theory and techniques of traditional, contemporary, and experimental typography.	WECM	
ARTC	2333	Development of skills and advanced knowledge of publishing software, with emphasis on the maintenance of visual continuity in documents for publication.	WECM	
ARTC	2335	Preparation of a portfolio comprised of completed graphic design projects. Evaluation and demonstration of portfolio presentation methods based on the student's specific area of study.	WECM	
ARTC	2340	Advanced use of software applications and/or various media with emphasis on output procedures, the resolution of complex design issues, and concept development.	WECM	
ARTC	2347	An advanced study of the design process and art direction. Emphasis on form and content through the selection, creation, and integration of typographic, photographic, illustrative, and design elements.	WECM	
ARTC	2348	A project based page layout course from concept to completion addressing design problems, preflight of files, color separations, and trapping techniques.	WECM	
ARTC	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





ARTC	2435	Preparation of a portfolio comprised of completed graphic design class projects. Evaluation and demonstration of portfolio presentation methods based on the student's specific area of study.	WECM	
ARTS	2311	This course will focus on two- or three-dimensional projects in a special topics area. Emphasis is on individual expression.	ACGM	expression
ARTS	2317	This course continues ARTS 2316. Emphasis is on individual expression.	ACGM	expression
ARTS	1311	Basic concepts of design with two-dimensional materials are explored. The use of line, color, illusion of space or mass, texture, value, shape, and size in composition is considered.	ACGM	Space
ARTS	2313	Introduction to the computer as an art tool with emphasis on design principles and visual communication or ideas. Course will include exposure to basic computer graphic technology including computer illustration and electronic imaging techniques.	ACGM	technology
ARTS	2347	Glaze technology is studied. Advanced problems in the creation of artistic and practical ceramic ware.	ACGM	technology
ARTS	2366	This course explores studio techniques in water base media. Emphasis is placed on exploration of a variety of modes and techniques as a means to original expression.	ACGM	Water, expression
ARTS	1170	Area artists, critics, and art educators speak with students about the work exhibited in the gallery and discuss current art styles and movements. They also discuss specific aspects of being artists in contemporary society.	ACGM	
ARTS	1301	Films, lectures, slides, and discussions focus on the theoretical, cultural, and historical aspects of the visual arts. Emphasis is on the development of visual and aesthetic awareness.	ACGM	





ARTS	1303	This course covers the history of western art from prehistoric time through the Gothic period. It explores the cultural, geophysical, and personal influences on art styles.	ACGM	
ARTS	1304	This course covers the history of art from the Renaissance through the present. It explores the cultural, geophysical, and personal influences on art styles.	ACGM	
ARTS	1312	Basic concepts of design with three-dimensional materials are explored. The use of mass, space, movement, and texture, line, plane, volume, color, and scale is considered.	ACGM	
ARTS	1313	Introduction to the creative media designed to enhance artistic awareness and sensitivity through the creative and imaginative use of art materials and tools. Includes art history and culture through the exploration of a variety of art works with an emphasis on aesthetic judgment and growth.	ACGM	
ARTS	1316	This beginning course investigates various media, techniques, and subjects. It explores perceptual and descriptive possibilities and considers drawing as a developmental process as well as an end in itself.	ACGM	
ARTS	1317	This course is an expansion of ARTS 1316. It stresses the expressive and conceptual aspects of drawing, including advanced composition arrangements, a range of wet and dry media, and the development of an individual approach to theme and content.	ACGM	
ARTS	2314	This course is a continuation of Computer Graphics Design I. Students will further explore advanced design problems through continued experimentation with computer graphics techniques.	ACGM	





ARTS	2316	This studio course stresses fundamental concepts of painting with acrylics and oils. Emphasis is on painting from still life, models, and the imagination.	ACGM	
ARTS	2323	This course covers the analytic and expressive drawing of the human figure. Movement and volume are stressed.	ACGM	
ARTS	2326	Various sculptural approaches are explored. Different media and techniques are used.	ACGM	
ARTS	2333	Basic printmaking processes are introduced. Included are planographic, intaglio, stencil and relief processes.	ACGM	
ARTS	2337	Structure and design of woven and non-woven fiber forms.	ACGM	
ARTS	2341	This course explores the uses of metal in design, basic fabrication techniques in metal, bezel setting of stones, and simple casting. Emphasis is on original design.	ACGM	
ARTS	2346	This course focuses on the building of pottery forms by coil, slab, and use of the wheel. Glazing and firing are also included.	ACGM	
ARTS	2348	Studio art course that explores the potential of the computer hardware and software media for their visual, conceptual, and practical uses in the visual arts.	ACGM	
ARTS	2356	Introduction to the basics of photography. Includes camera operation, techniques, knowledge of chemistry, and presentation skills. Emphasis on design, history, and contemporary trends as a means of developing an understanding of photographic aesthetics.	ACGM	
ARTS	2357	Extends the student's knowledge of technique and guides them in developing personal outlooks toward specific applications of the photographic process.	ACGM	





ARTS	2370	The development of the art of western culture during the Renaissance Period is presented. Emphasis is on the development of Renaissance art in Northern and Southern Europe.	ACGM	
ARTS	2389	An instructional program designed to integrate on-campus study with practical hands-on work experience in the humanities and/or fine arts. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of languages, art, music, philosophy, or religion. This course should be given a discipline prefix and Texas Common Course Number 2389.	ACGM	
ARTT	1141	Introduction to original and creative drawing using graphite and carbon pencils to draw a variety of still-life displays creating form, shape, and three dimensional views using shading, value range, depth, proportion, and various art materials. Development of layout skills; hand/eye coordination; and accurate observation of shape, texture, and tone.	WECM	
ARTT	1201	Introduction to the techniques of drawing the human figure with emphasis on gesture and contour technique. Topics include structure of the human form in relation to drawing body proportions; bone and muscle structure of the human form and the bone and muscle components of human hands and other appendages.	WECM	
ARTV	2345	A studio course focused on advanced 3-D modeling and rendering techniques using industry standard software, modeling techniques, camera settings, lighting, and surfacing to develop detailed environments.	WECM	environment





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ARTV	2445	A studio course focused on advanced 3-D modeling and rendering techniques using industry standard software, modeling techniques, camera settings, lighting, and surfacing to develop detailed environments.	WECM	environment
ARTV	1303	Examination of animation concepts, principles, and storyboard for basic production. Emphasizes creating movement and expression utilizing traditionally or digitally generated image sequences.	WECM	expression
ARTV	1403	Examination of animation concepts, principles, and storyboard for basic production. Emphasizes creating movement and expression utilizing traditionally or digitally generated image sequences.	WECM	expression
ARTV	1302	Basic study of technical computer models and animation.	WECM	
ARTV	1311	Techniques of storyboarding including organizing a project's content and arranging it in a visual format. Determine a project's content; choose or create graphics; and sequence the content to convey the message.	WECM	
ARTV	1341	Intermediate level 3-D course introducing animation tools and techniques used to create movement. Emphasis on using the principles of animation.	WECM	
ARTV	1343	Digitizing sound and incorporating it into multimedia or web titles for various delivery systems. Emphasizes compression issues, sampling, synchronizing, and resource management.	WECM	
ARTV	1345	Techniques of three-dimensional (3-D) modeling utilizing appropriate software. Includes the creation and modification of 3-D geometric shapes, use of a variety of rendering techniques, camera light sources, texture, and surface mapping.	WECM	





ARTV	1351	Producing and editing video and sound for multimedia or web productions. Emphasizes capture, editing, and outputting of video using a desktop digital video workstation.	WECM	
ARTV	1441	Intermediate level 3-D course introducing animation tools and techniques used to create movement. Emphasis on using the principles of animation.	WECM	
ARTV	1445	Techniques of three-dimensional (3-D) modeling utilizing appropriate software. Includes the creation and modification of 3-D geometric shapes, use of a variety of rendering techniques, camera light sources, texture, and surface mapping.	WECM	
ARTV	1451	Producing and editing video and sound for multimedia or web productions. Emphasizes capture, editing, and outputting of video using a desktop digital video workstation.	WECM	
ARTV	2301	Skill development in the use of software to develop storyboards and two-dimensional animation including creating, importing, and sequencing media elements to create multimedia presentation. Emphasis on conceptualization, creativity, and visual aesthetics.	WECM	
ARTV	2330	Advanced study of technical aspects of animation. Emphasizes aesthetic design and completion of an animation project.	WECM	
ARTV	2335	A course in the development of a professional portfolio to showcase the student's skills in animation. Includes self-promotion, resumes, portfolio distribution, and interview techniques.	WECM	





ARTV	2341	Advanced digital video techniques for post-production. Emphasizes integration of special effects and animation for film, video, and the Internet. Exploration of new and emerging compression and video streaming technologies.	WECM	
ARTV	2351	Advanced level 3-D course utilizing animation tools and techniques used to develop movement. Emphasis on advanced animation techniques.	WECM	
ARTV	2355	Advanced work in 3-D animation. Emphasis on character modeling, rigging and animation.	WECM	
ARTV	2401	Skill development in the use of software to develop storyboards and two-dimensional animation including creating, importing, and sequencing media elements to create multimedia presentation. Emphasis on conceptualization, creativity, and visual aesthetics.	WECM	
ARTV	2430	Technical aspects of traditional animation. Emphasizes aesthetic design and completion of an advanced animation project. Includes application of advanced skills and knowledge.	WECM	
ARTV	2435	A course in the development of a professional portfolio to showcase the student's skills in animation. Includes self-promotion, resumes, portfolio distribution, and interview techniques.	WECM	
ARTV	2451	Advanced level 3-D course utilizing animation tools and techniques used to develop movement. Emphasis on advanced animation techniques.	WECM	





ARTV	2470	An exploration of mobile web development designs and solutions. Topics include web-based scenarios utilizing Android and iOS applications, problem solving using industry standards from mobile device manufactures and developing mobile solutions with industry accepted software and simulators. Students will be exposed to both Android iOS device development.	WECM	
ARTV	2471	A study of the essential concepts, tools and techniques for developing Android applications for Touch pad devices and smart phones. Topics include basic concepts of Android development, downloading and installing the Android software development kit (SDK) and creating a simple application.	WECM	
AUMT	1307	An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of batteries, charging and starting systems, and electrical accessories. Emphasis on electrical schematic diagrams and service manuals. May be taught manufacturer specific.	WECM	Access, Air
AUMT	2321	Repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. May be taught manufacturer specific.	WECM	Access, Air
AUMT	1316	A study of automotive suspension and steering systems including tire and wheel problem diagnosis, component repair, and alignment procedures. May be taught manufacturer specific.	WECM	Air





AUMT	2313	A study of automotive clutches, clutch operation devices, manual transmissions/ transaxles, and differentials with emphasis on the diagnosis and repair of transmissions/transaxles and drive lines. May be taught with manufacturer specific instructions.	WECM	Air
AUMT	2332	A study of the electronic controls and actuators and the related circuits of modern automatic transmissions and automatic transaxles. Diagnosis, service, and repair procedures with emphasis on the use of special tools, scan tools, and proper repair techniques. May be taught manufacturer specific.	WECM	Air
AUMT	2402	Diagnosis and repair of modern light-duty automotive compression ignition engines and related systems. Includes the use of advanced engine performance diagnostic equipment.	WECM	Air
AUMT	1345	Diagnosis and repair of manual/electronic climate control systems; includes the refrigeration cycle and EPA guidelines for refrigerant handling. May be taught manufacturer specific	WECM	Air, climate-related
AUMT	2343	Diagnosis and repair of emission control systems including OBD II systems with emphasis on the application of advanced diagnostic information, tools, and techniques. Course will include state and federal laws required for preparation for licensing. May be taught with manufacturer specific instructions.	WECM	Air, emission, CO2 emission
AUMT	2340	A study of the composition and use of various alternative automobile fuels including retrofit procedures and applications, emission standards, availability, and cost effectiveness. Overview of federal and state legislation concerning fuels.	WECM	effective, emission, CO2 emission





AUMT	2334	A study of diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems; and proper use of advanced engine performance diagnostic equipment. May be taught manufacturer specific.	WECM	emission, CO2 emission
AUMT	2311	A study of electrical principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology. May be taught manufacturer specific.	WECM	technology
AUMT	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. May be taught manufacturer specific.	WECM	technology, events
AUMT	1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
AUMT	1280	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
AUMT	1281	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





AUMT	1305	An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automotive maintenance. May be taught manufacturer specific.	WECM	
AUMT	1306	Fundamentals of engine inspection, removal and installation procedures. May be taught manufacturer specific.	WECM	
AUMT	1310	Operation and repair of drum/disc type brake systems. Emphasis on safe use of modern equipment. Topics include brake theory, diagnosis, and repair of power, manual, antilock brake systems, and parking brakes. May be taught with manufacturer specific instructions.	WECM	
AUMT	1312	This is an introductory course designed to provide the student with the fundamentals of operation and maintenance procedures of vehicle subsystems which include researching vehicle service information. Students will learn basic automotive shop safety, tool, and equipment use. Upon completion of the course, students should be able to safely and accurately perform basic automotive maintenance. Maybe taught manufacturer specific.	WECM	
AUMT	1313	A study of automotive suspension and steering systems including the theory of wheel and tire construction and alignment angles and procedures.	WECM	
AUMT	1319	Fundamentals of engine operation, diagnosis and repair including lubrication systems and cooling systems. Emphasis on overhaul of selected engines, identification and inspection, measurements, and disassembly, repair, and reassembly of the engine. May be taught manufacturer specific.	WECM	





AUMT	1380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
AUMT	1381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
AUMT	2280	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
AUMT	2281	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
AUMT	2317	Theory, operation, diagnosis, and repair of basic engine dynamics, ignition systems, and fuel delivery systems. Use of basic engine performance diagnostic equipment. May be taught with manufacturer specific instructions.	WECM	





AUMT	2325	A study of the operation, hydraulic principles, and related circuits of modern automatic transmissions and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and proper repair techniques. May be taught manufacturer specific.	WECM	
AUMT	2328	Mastery of automotive service including competencies covered in related courses. May be taught manufacturer specific.	WECM	
AUMT	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
AUMT	2381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
BCIS	1305	Students will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. This course will fulfill degree requirements established by the colleges of DCCCD only if this course has been successfully completed and the date of completion does not exceed 10 years.	ACGM	environment





BCIS	1405	Students will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. This course will fulfill degree requirements established by the colleges of DCCCD only if this course has been successfully completed and the date of completion does not exceed 10 years.	ACGM	environment
BIOL	2420	This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. The lab covers basics of culture and identification of bacteria and microbial ecology. Lecture and lab emphasis is on medical microbiology, infectious diseases, and public health.	ACGM	Ecology, biosphere
BIOL	1407	An introductory survey of current biological concepts for students majoring in the sciences. The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Laboratory activities will reinforce study of these concepts.	ACGM	Ecology, cruelty to animals, diversity





BIOL	1409	Presentation of biological concepts for the non-science major. This course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Laboratory activities will reinforce these concepts.	ACGM	Ecology, diversity
BIOL	2406	Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Laboratory activities will reinforce these concepts.	ACGM	Ecology, environment, desertification, natural resources
BIOL	2306	Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research.	ACGM	Ecology, environment, disaster, natural resources
BIOL	1411	Fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi. Laboratory activities will reinforce all of these concepts. (This course is intended for science majors.)	ACGM	environment





BIOL	1322	This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed.	ACGM	Food, undernourishment
BIOL	1406	Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Study and examination of the concepts of cytology, reproduction, genetics, and scientific reasoning are included. Laboratory activities will reinforce these concepts.	ACGM	Genetics, climate adaptation, climate-related, climate change
BIOL	2402	Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Content may be either integrated or specialized. This is a transferable course intended for those seeking to complete a Bachelor's Degree.	ACGM	reproductive health, reproductive rights





BIOL	2421	Principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. Emphasis is placed on relationships that influence humans: public health, infectious diseases, and immunology, biotechnology, and environmental and industrial applications. Lab experimentation with pure cultures and selected media will be used to study extensively the medical, environmental, and industrial importance of these microbes. Designed for students in science or pre-professional programs.	ACGM	technology, environment
BIOL	1408	Presentation of biological concepts for the non-science major. Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Laboratory activities will reinforce these concepts.	ACGM	
BIOL	2389	This instructional program is designed to integrate on- campus study with practical hands-on work experience in biological sciences/life sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of living organisms and their systems.	ACGM	





BIOL	2401	Anatomy and Physiology I is the first part of a two course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. This is a transferable Major's course intended for those seeking to complete a Bachelor's Degree.	ACGM	
BIOL	2416	This course focuses on genetics. Study of the principles of molecular and classical genetics and the function and transmission of hereditary material. May include population genetics and genetic engineering. Plant and animal materials are used to study population genetics, linkage, gene structure and function, and other concepts of heredity.	ACGM	
BMGT	1306	For individuals whose responsibility includes general management and supervision of public buildings, business and industrial facilities, and other complexes requiring supervision and control. Includes fire alarm maintenance, plant maintenance, occupational safety, OSHA rules and regulations, management of maintenance supervisors, and hazardous materials awareness.	WECM	responsibility, responsible





BMGT	2384	Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	cooperation
BMGT	2347	Instruction in interpreting data for effective problem solving and recommending corrective action with emphasis on a structured approach to critical thinking and problem solving in a team environment.	WECM	effective, environment
BMGT	2331	Quality of productivity in organizations. Includes planning for quality throughout the organization, analysis of costs of quality, and employee empowerment.	WECM	empower, planning
BMGT	2341	Strategic management process involving analysis of how organizations develop and implement a strategy for achieving organizational objectives in a changing environment.	WECM	environment
BMGT	1313	The purchasing process as it relates to such topics as inventory control, price determination, vendor selection, negotiation techniques, and ethical issues.	WECM	ethical
BMGT	1309	Critical path methods for planning and controlling projects. Includes time/cost tradeoffs, resource utilization, stochastic considerations, task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude, and project supervision.	WECM	planning





BMGT	2303	Decision-making and problem-solving processes in organizations utilizing logical and creative problem solving techniques. Application of theory is provided by experiential activities using managerial decision tools.	WECM	responsive decision-making
BMGT	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
BMGT	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
BMGT	1397	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary in the area of business analytics.	WECM	technology, events
BMGT	1301	The role of the supervisor includes managerial functions as applied to leadership, counseling, motivation, and human relations skills.	WECM	
BMGT	1305	Basic theory and processes of communication skills necessary for the management of an organization's workforce.	WECM	
BMGT	1327	Concepts, terminology, principles, theories, and issues in the field of management.	WECM	
BMGT	1331	Fundamentals of the various techniques used in the practice of production and operations management. Includes location, design, and resource allocation.	WECM	





BMGT	1382	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. The student should have previous credit in or concurrent enrollment in BMGT 1301 or demonstrated competence approved by the instructor.	WECM	
BMGT	1383	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. The student should have previous credit in or concurrent enrollment in HRPO 2301 or demonstrated competence approved by the instructor.	WECM	
BMGT	1482	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
BMGT	1483	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





BMGT	2309	Concepts of leadership and its relationship to management. Prepares the student with leadership and communication skills needed to motivate and identify leadership styles.	WECM	
BMGT	2382	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. The student should have previous credit in or concurrent enrollment in HRPO 2307 or demonstrated competence approved by the instructor.	WECM	
BMGT	2383	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. The student should have previous credit in or concurrent enrollment in BMGT 2303 or demonstrated competence approved by the instructor.	WECM	





BNKG	2372	This course is designed to provide an introduction to mortgage loan underwriting. This will include a review and training in all facets of risk analysis and collateral review. Topics covered in detail will be the conventional underwriting review process. Additional topics will be a basic review of the differences in FHA and VA underwriting requirements and the determination of credit risk and analysis of collateral used in the determination of risk of collateral value used in Sub Prime underwriting.	WECM	disparities
BNKG	1359	This course examines how mortgage lenders handle loans from the time a loan is closed until the final payment is made. The course focuses on the legal aspects and actual procedures used in the daily operations of the loan servicing function. Topics include escrow accounting, contract servicing, governmental regulations, taxing authorities and establishing tax rates and economic impacts of delinquency.	WECM	economic, pay, bribery





BNKG	1370	The purpose of this course is to prepare the student to understand the dynamics of loan closing and their impact on real estate loans. This course can be one of several to prepare the individual to become more aware of all the aspects of the mortgage banking industry. This course will help students to develop the understanding and skills necessary to become more effective reviewers of real estate loans. This course integrates all aspects of understanding the federal regulations documentation required and the processing of real estate loans. It incorporates the understanding and importance and purpose of each and every document involved in real estate transactions. Various techniques and tools will be reviewed, as will the understanding the importance of properly completion of these legal documents.	WECM	effective
BNKG	1371	A study of the unique underwriting issues, procedures and practices that will face a beginning Federal Housing Authority (FHA) residential real estate loan underwriter when dealing with the public on FHA/Department of Housing and Urban Development (HUD) approved residential mortgages. This course will cover the basics of the language of FHA/HUD underwriting, loan documentation, loan and ratio analysis, credit analysis, valuation of property, loan submission and approval.	WECM	Housing, urbanization, urban sprawl





BNKG	1358	A study of the purpose of the secondary mortgage market and its history. Included are secondary market conduits, review of the basic strategies used in the selling of closed real estate mortgages into the secondary market, conventional and governmental segments, mortgage-backed securities and bonds, regulatory requirements, GNMA mortgage-backed securities, preparing and completing loans for sale, and servicing sold loans. Other topics included are institutional and non-institutional lenders, types of mortgages, and alternative mortgage instruments.	WECM	Institutions
BNKG	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
BNKG	1280	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
BNKG	1340	Monetary policy and its related effects on financial intermediaries. Includes financial markets, regulatory functions, and structures. Addresses investment and funds management.	WECM	
BNKG	1351	Characteristics and benefits of bank/financial products and services. Emphasis on the personal selling process and quality customer service. Application of personal selling, cross-selling, and related product benefits to individual customer needs.	WECM	





BNKG	1353	Overview of the mortgage lending market and process. Emphasis on documentation, credits evaluation, federal regulation and state laws related to mortgage loans.	WECM	
BNKG	1356	A study of the process of evaluating financial statements, cash flow, and ratio analysis of individuals and businesses. Emphasis on the relationship of comparative analysis and industry standards.	WECM	
BNKG	1380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
BNKG	1381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
BNKG	1391	This course provides the student with comprehensive training in mortgage loan closing with an in-depth study of title commitments/policies, engineer's survey, deed restrictions, and various documents (legal and other) used for residential mortgage loans.	WECM	
BNKG	2281	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





BNKG	2370	This course is designed to provide in-depth training for all facets of risk analysis and collateral review pertaining to analyzing the risk and determining the credit grade of the sub-prime mortgage loan. Topics covered in-depth will include, but are not limited to, grading the credit to determine the level of credit grade, analyzing and evaluating documentation to determine credit risk and analyzing the collateral to determine risk of collateral value.	WECM	
BUSG	1304	A study of the financial problems encountered by financial advisors when managing family financial affairs. Includes methods to advise clients on topics such as estate planning, retirement, home ownership, savings, and investment planning.	WECM	Air, family, planning, debt, debt relief
BUSG	1302	Unique aspects of creating and managing an E-Commerce business; topics address the Internet, infrastructure for electronic commerce, markup languages, web-based tools and software, security issues, electronic payment systems, strategies for marketing, sales and purchasing, legal, ethical and tax issues, management functions including how managers plan, exercise leadership, organize, and control the operations.	WECM	pay, ethical, security
BUSG	1341	A study of the financial structure of a small business. Topics address business finance, including where the funds come from and what they are used for; budgeting including planning and preparing, record keeping, taxation, insurance, and banking.	WECM	planning
BUSG	1303	Financial dynamics of a business. Includes monetary and credit theory, cash inventory, capital management, and consumer and government finance. Emphasizes the time value of money.	WECM	





BUSG	1315	A course in the unique aspects of managing a small business. Topics address management functions including how managers plan, exercise leadership, organize, and control the operations.	WECM	
BUSG	2309	Starting, operating, and growing a small business. Includes essential management skills, how to prepare a business plan, accounting, financial needs, staffing, marketing strategies, and legal issues.	WECM	
BUSI	1301	This course provides a survey of economic systems, forms of business ownership, and considerations for running a business. Students will learn various aspects of business, management, and leadership functions; organizational considerations; and decision-making processes. Financial topics are introduced, including accounting, money and banking, and securities markets. Also included are discussions of business challenges in the legal and regulatory environment, business ethics, social responsibility, and international business. Emphasized is the dynamic role of business in everyday life.	ACGM	economic, environment, responsive decision-making
BUSI	1307	Personal and family accounts, budgets and budgetary control, bank accounts, charge accounts, borrowing, investing, insurance, standards of living, renting or home ownership, and wills and trust plans. NOTE: This course is not part of the business field of study and may not transfer toward a degree in business.	ACGM	family, transparent





BUSI	2301	The course provides the student with foundational information about the U.S. legal system and dispute resolution, and their impact on business. The major content areas will include general principles of law, the relationship of business and the U.S. Constitution, state and federal legal systems, the relationship between law and ethics, contracts, sales, torts, agency law, intellectual property, and business law in the global context.	ACGM	Global context, democracy
CBFM	2311	This course is a continuation of CBFM 1311 which includes principles of residential and commercial maintenance and repair. Emphasis on safety, materials, and tool identification.	WECM	Air
CBFM	2317	Study of the general principles of mechanical and electrical systems as related to inspection, repair, and preventive maintenance of facility equipment. Lab required.	WECM	
CDEC	1413	A study of the fundamentals of developmentally appropriate curriculum design and implementation in early care and education programs for children.	WECM	Education
CDEC	2336	An advanced study of the skills and techniques in managing early child care and education programs.	WECM	Education
CDEC	1311	An introduction to the education of the young child. Includes developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities, and current issues. Course content is aligned with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Requires students to participate in a minimum of 16 hours of field experience with children from infancy through age 12 in a variety of settings with varied and diverse populations.	WECM	Education, ethical





CDEC	1303	Study of the child, family, community, and schools. Includes parent education and involvement, family and community lifestyles, child abuse, and current family life issues. Course content is aligned with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Requires students to participate in a minimum of 16 hours field experience with children from infancy through age 12 in a variety of settings with varied and diverse populations.	WECM	Education, family
CDEC	2315	An overview of multicultural education to include relationship with the family and community to develop awareness and sensitivity to diversity related to individual needs of children.	WECM	Education, family, cultural significance
CDEC	2287	An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience.	WECM	Education, Institutions
CDEC	2326	A practical application of management procedures for early child care education programs, including a study of planning, operating, supervising, and evaluating programs. Topics on philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluating, and communication.	WECM	Education, planning
CDEC	1321	A study of appropriate infant and toddler programs (birth to age 3), including an overview of development, quality routines, appropriate environments, materials and activities, and teaching/guidance techniques.	WECM	environment





CDEC	2322	A continuation of the study of the requirements for the Child Development Associate credential (CDA). The six functional areas of study include safe, healthy, learning environment, self, social, and guidance.	WECM	environment
CDEC	2341	A study of appropriate programs for the school age child (5 to 13 years), including an overview of development, appropriate environments, materials, and activities and teaching/guidance techniques.	WECM	environment
CDEC	2324	Continuation of the requirements for the Child Development Associate credential (CDA). The three functional areas of study include family, program management, and professionalism.	WECM	family
CDEC	1318	Factors impacting the well-being of young children. Includes healthy behavior, food, nutrition, fitness, and safety practices. Focuses on local and national standards and legal implications of relevant policies and regulations. Course content is aligned with State Board of Educator Certification Pedagogy and Professional Responsibilities standards. Requires students to participate in a minimum of 16 hours field experience with children from infancy through age 12 in a variety of settings with varied and diverse populations.	WECM	Food, Health, local breeds
CDEC	2304	Methods used in the identification of physical, emotional, and sexual abuse and neglect with an emphasis on developing skills for working with children and families. Includes methods of referral to public and private agencies that deal with investigation and treatment.	WECM	Harassment





CDEC	2289	An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience.	WECM	Institutions
CDEC	2286	An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience.	WECM	Institutions, legitimate institution
CDEC	1356	An exploration of principles, methods, and materials for teaching young children language and literacy through a play-based, integrated curriculum.	WECM	literacy, literacy
CDEC	1319	An exploration of guidance strategies for promoting prosocial behaviors with individual and groups of children. Emphasis on positive guidance principles and techniques, family involvement and cultural influences. Practical application through direct participation with children.	WECM	Participation, family, cultural significance, direct participation, meaningful participation





CDEC	2328	An in-depth study of the skills and techniques in managing early care and education programs, including legal and ethical issues, personnel management, team building, leadership, conflict resolution, stress management, advocacy, professionalism, fiscal analysis and planning, parent education/partnerships, and technical applications in programs.	WECM	partner, ethical, planning, capacity-building, multi- stakeholder partnerships
CDEC	1395	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
CDEC	1396	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
CDEC	1317	Based on the requirements for the Child Development Associate National Credential (CDA). Topics include CDA overview, observation skills, and child growth and development. The four functional areas of study are creative, cognitive, physical, and communication.	WECM	
CDEC	1323	A study of child development observation, assessment skills and techniques.	WECM	
CDEC	1341	Preparation for the Child Development Associate (CDA) credential assessment includes writing CDA competency statements, completing a CDA professional resource file, and preparing for formal CDA observation and assessment.	WECM	
CDEC	1343	Study of an approved career topic. Research, presentation of findings, and practical applications are emphasized as they relate to the selected topic.	WECM	





CDEC	1354	Physical, emotional, social, and cognitive factors impacting growth and development of children through adolescence.	WECM
CDEC	1358	An exploration of principles, methods, and materials for teaching children music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking.	WECM
CDEC	1359	A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, intervention strategies, available resources, referral processes, the advocacy role, and legislative issues.	WECM
CDEC	2307	An exploration of principles, methods, and materials for teaching children math and science concepts and process skills through discovery and play.	WECM
CDEC	2340	Exploration of development and implementation of curriculum for children with special needs.	WECM
CDEC	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM





CETT	1204	Instruction in this course will teach high reliability soldering, desoldering, circuitry repair, plated-thru-hole repairs, conformal coating removal, industry standards, electrostatic discharge (ESD) control, surface mount device (SMD) installation, removal and replacement using hand held systems or reflow workstations. Students will solder highly reliable connections; solder to industry standards; desolder connections; install surface mount devices; remove surface mount devices; remove conformal coatings; repair and/or replace traces, pads, and eyelets.	WECM	Air
CETT	1491	This course will teach individuals in the renewable energy field how to read, interpret and correlate schematic drawings, in the fields of electronics, construction trades, mechanical, electrical, pneumatics, and hydraulics. These students will be able to read a drawing, go to the physical device and produce the drawing, or begin at the physical device and reduce it to a drawing. The course is also intended to make a person proficient in the physical construction of a drawing.	WECM	clean energy, renewable energy, renewable resources, renewables,
CETT	1449	Digital Systems is a course in electronics covering digital systems. Emphasis on application and troubleshooting digital systems using counters, registers, code converters, multiplexers, analog-to-digital circuits, digital-to-analog circuits, and large-scale integrated circuits. The student will evaluate the operation of digital systems while operating in correct and fault mode using various test instruments; describe the difference between a digital system and an analog system; and draw a simple block diagram of a digital computer system.	WECM	disparities





CETT	1303	A study of the fundamentals of direct current including Ohm's law, Kirchhoff's laws and circuit analysis techniques.	WECM	
CETT	1305	A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance.	WECM	
CETT	1331	Introduction to a high level programming language such as BASIC, PASCAL, or "C". Topics include structured programming and problem solving as they apply to technical applications.	WECM	
CETT	1357	A study of the characteristics, operations, and testing of linear integrated circuits. Applications include instrumentation and active filtering.	WECM	
CETT	1402	Principles of electricity including proper use of test equipment, A/C and D/C circuits, and component theory and operation. Students will identify basic principles of electricity (A/C and D/C), voltage, current, and circuitry; apply Ohm's law to electrical calculations; use test equipment to measure continuity, voltage, and current values; and use electrical safety practices.	WECM	
CETT	1403	A study of the fundamentals of direct current including Ohm's law, Kirchhoff's laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements.	WECM	
CETT	1405	A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance.	WECM	





CETT	1407	Applies concepts of electricity, electronics, and digital fundamentals; supports programs requiring a general knowledge of electronics. Students will build and test circuits using analog and digital components; visually identify components and component values; build and test series and parallel resistive circuits; check resistors, diodes, and transistors using a multimeter.	WECM	
CETT	1425	An entry-level course in digital electronics to include numbering systems, logic gates, Boolean algebra, and combinational logic	WECM	
CETT	1429	A study of diodes, transistor characteristics and other semiconductor devices, including analysis of static and dynamic characteristics, biasing techniques, and thermal considerations.	WECM	
CETT	1431	Introduction to a high level programming language. Includes structured programming and problem solving applicable to discrete electronic devices.	WECM	
CETT	1441	A study of various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis. Topics will include JFETs, MOSFETs, oscillators, thyristors, power supply systems, voltage regulators, multistage amplifiers and power amplifiers.	WECM	
CETT	1445	An introductory course in microprocessor software and hardware; its architecture, timing sequence, operation, and programming; and discussion of appropriate software diagnostic language and tools.	WECM	
CETT	1457	In depth coverage of the characteristics, operations, stabilization, testing, and feedback techniques of linear integrated circuits. Application in computation, measurements, instrumentation, and active filtering.	WECM	





CETT	2337	A study of microprocessors and microcomputers with an emphasis on embedded controllers for industrial and commercial applications. Topics include RAM, ROM and input/output (I/O) interfacing. Introduction to programming.	WECM	
CETT	2433	Digital Computer circuits is a study of the three major component systems of a digital computer including arithmetic logic operations, RAM and ROM memory systems, and control systems. The student will explain the operation of the three basic sections of any computer system. The student will construct and troubleshoot computer circuits including arithmetic logic units, memory systems, and control systems; describe the function of the BIOS (Basic Input Output System) in a computer system; and how a computer knows what to address when first cold booted.	WECM	
CETT	2435	An advanced course utilizing the microprocessor in control systems and interfacing. Emphasis on microprocessor hardware and implementation of peripheral interfacing.	WECM	
CETT	2449	Principles of electrical/electronic design encompassing schematics wiring diagrams, materials lists, operating characteristics, completion schedules, and cost estimates.	WECM	
CETT	2480	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





CETT	2481	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
CHEF	2302	Instruction in the preparation of stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	Clean, Air, Stocks, Food
CHEF	2341	Skill development for culinary competition by offering advanced experience in salon presentations as well as hot food competition. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	Clean, Food
CHEF	1305	A study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points); and work place safety standards. This course must be completed with a grade of 'C' or better.	WECM	Clean, Food, contamination





CHEF	1441	A study of the development of regional cuisine's in the United States with emphasis on the similarities in production and service systems. Application of skills to develop, organize, and build a portfolio of recipe strategies and production systems. Students will work in groups to plan, execute and evaluate a weekly meal served to the public. Focus will be on menu and production planning, as well as cost analysis. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	Clean, planning
CHEF	1301	A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. The student will discuss and prepare various stocks, sauces, soups, fruit, vegetables, starches, sandwiches, salads and dressings. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. This course must be completed with a grade of 'C' or better. This course requires practical knowledge of requirements for Food and Sanitation Guidelines as set by Health and Safety Standards.	WECM	Clean, Stocks, Food
CHEF	1310	A study of specialty foods and garnishes. Emphasis on design, techniques, and display of fine foods. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	Food





CHEF	1302	Introduction to the principles of planning, preparation, and presentation of nutritionally balanced meals. Adaptation of basic cooking techniques to lower the fat and caloric content. Alternative methods and ingredients will be used to achieve a healthier cooking style. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	planning
CHEF	2331	Topics include the concept of pre-cooked food items and the preparation of canapes, hors d'oeuvres, and breakfast items. Meat, seafood, and poultry preparation, baking and menu planning are also included. The student will discuss and review Basic Food Preparation. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	planning, Food
CHEF	1445	The study of classical cooking skills associated with the preparation and service of international and ethnic cuisines. Topics include similarities between food production systems used in the United States and other regions of the world. Students will work in groups to plan, execute and evaluate a weekly meal served to the public. Focus will be on menu and production planning, as well as cost analysis. Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	planning, world, Food





1264	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
1364	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
2364	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
1406	This is a survey course introducing chemistry to allied health students. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, environmental/consumer chemistry.	ACGM	environment, Food
1405	This course is for non-science majors. Fundamental concepts are presented in lecture and laboratory including the periodic table, atomic structure, chemical bonding, reactions, stoichiometry, states of matter, properties of metals, nonmetals and compounds, chemical nomenclature, acid-base theory, oxidation-reduction and solutions. Descriptive chemistry is emphasized.	ACGM	
1407	This course is for non-science majors. It surveys organic chemistry and biochemistry. The reactions, syntheses, nomenclature, uses, purposes and properties of the important classes of organic and biochemical compounds are studied.	ACGM	
1409	This lecture and lab course should combine all of the elements of CHEM 1309 General Chemistry for Engineering Majors (lecture) and CHEM 1109 General Chemistry for Engineering Majors (lab), including the learning outcomes listed for both courses.	ACGM	
	1364 2364 1406 1405	individualized learning plan developed by the employer, college, and student. 1364 Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. 2364 Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. 1406 This is a survey course introducing chemistry to allied health students. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, environmental/consumer chemistry. 1405 This course is for non-science majors. Fundamental concepts are presented in lecture and laboratory including the periodic table, atomic structure, chemical bonding, reactions, stoichiometry, states of matter, properties of metals, nonmetals and compounds, chemical nomenclature, acid-base theory, oxidation-reduction and solutions. Descriptive chemistry is emphasized. 1407 This course is for non-science majors. It surveys organic chemistry and biochemistry. The reactions, syntheses, nomenclature, uses, purposes and properties of the important classes of organic and biochemical compounds are studied. 1409 This lecture and lab course should combine all of the elements of CHEM 1309 General Chemistry for Engineering Majors (lecture) and CHEM 1109 General Chemistry for Engineering Majors (lab), including the learning outcomes	individualized learning plan developed by the employer, college, and student. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This is a survey course introducing chemistry to allied health students. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, environmental/consumer chemistry. This course is for non-science majors. Fundamental concepts are presented in lecture and laboratory including the periodic table, atomic structure, chemical bonding, reactions, stoichiometry, states of matter, properties of metals, nonmetals and compounds, chemical nomenclature, acid-base theory, oxidation-reduction and solutions. Descriptive chemistry is emphasized. This course is for non-science majors. It surveys organic chemistry and biochemistry. The reactions, syntheses, nomenclature, uses, purposes and properties of the important classes of organic and biochemical compounds are studied. This lecture and lab course should combine all of the elements of CHEM 1309 General Chemistry for Engineering Majors (lecture) and CHEM 1109 General Chemistry for Engineering Majors (lecture) and CHEM 1109 General Chemistry for Engineering Majors (lecture) including the learning outcomes





СНЕМ	1411	Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry. Basic laboratory experiments will reinforce theoretical principles of general chemistry, introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports. High school chemistry, CHEM 1405 or the equivalent are strongly recommended.	ACGM	
CHEM	1412	Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry. Basic laboratory experiments will reinforce theoretical principles of general chemistry, introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports.	ACGM	
CHEM	2389	An instructional program designed to integrate on-campus study with practical hands-on work experience in the physical sciences. In conjunction with class seminars, the individual students will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena.	ACGM	





СНЕМ	2423	Fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Laboratory activities will reinforce fundamental principles of organic chemistry I including methods for the purification and identification of organic compounds. This course is intended for students in science or pre-professional programs.	ACGM	
CHEM	2425	Advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Laboratory activities will reinforce fundamental principles of Organic Chemistry II. This course is intended for students in science or pre-professional programs.	ACGM	





CHIN	1411	This is the first semester of academic transfer Chinese. This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented.	ACGM	cultural significance
CHIN	1412	This is the second semester of academic transfer Chinese. This course continues the oral practice, reading, writing, grammar and cultural studies begun in CHIN 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax.	ACGM	cultural significance
CHIN	2311	This is the third semester of academic transfer Chinese. This course is designed to further develop student's overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded.	ACGM	cultural significance
CHIN	2312	This is the fourth semester of academic transfer Chinese. This course is a continuation of CHIN 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture.	ACGM	
CJLE	2522	This course includes the demonstration and practice of the skills expected of a police officer. Topics include patrol, traffic stops, use of force, mechanics of arrest, firearms safety and emergency medical care.	WECM	emergency, firearms





CJLE	2421	This course is a study of laws that are directly related to police field work. Topics include traffic, intoxicated driver, Penal Code, elements of crimes, the Family Code, Alcoholic Beverage Code, and civil liability.	WECM	family, crime
CJLE	1506	Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer II, III, IV, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Training Academy. NOTE: This course may be offered only by institutions licensed as a Police Academy by Texas Commission on Law Enforcement.	WECM	Institutions, legitimate institution
CJLE	1512	Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, III, IV, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Academy. NOTE: This course may be offered only by institutions licensed as a Police Academy by Texas Commission on Law Enforcement.	WECM	Institutions, legitimate institution
CJLE	1518	Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, II, IV, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Academy. NOTE: This course may be offered only by institutions licensed as a Police Academy by Texas Commission on Law Enforcement.	WECM	Institutions, legitimate institution





CJLE	1524	Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, II, III, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Training Academy. NOTE: This course may be offered only by institutions licensed as a Police Academy by Texas Commission on Law Enforcement.	WECM	Institutions, legitimate institution
CJLE	1429	Supplemental course taken in conjunction with Basic Peace Officer Courses I, II, III, and IV. Satisfies or exceeds the Texas Commission on Law Enforcement approved Basic Peace Officer Academy Course #1000. NOTE: This course may be offered only by institutions licensed as a Police Academy by Texas Commission on Law Enforcement.	WECM	Institutions, peace, legitimate institution
CJLE	1518	Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, II, IV, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Academy. NOTE: This course may be offered only by institutions licensed as a Police Academy by Texas Commission on Law Enforcement.	WECM	Institutions, peace, legitimate institution
CJLE	2420	This course is a study of the techniques and procedures used by police officers on patrol. Includes controlled substance identification, handling abnormal persons, traffic collision investigation, note taking and report writing, vehicle operation, traffic direction, crowd control, and jail operations.	WECM	





CJSA	1382	Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a specific discipline, specific learning objectives guide the student through work experience. The course may be repeated if topics and learning outcomes vary.	WECM	cooperation
CJSA	2382	Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a specific discipline, specific learning objectives guide the student through work experience. The course may be repeated if topics and learning outcomes vary.	WECM	cooperation
CJSA	2323	Theory and practice of crime scene investigation. Topics include report writing, blood and other body fluids, document examination, etchings, casts and molds, glass fractures, use of microscope, and firearms identification.	WECM	crime
CJSA	1471	An introduction to crime scene investigation, evidence gathering, and preservation. Utilizing lecture and lab, presents the methods, procedures, techniques for the analysis and preservation of crime scene evidence appropriate for first responders to a crime scene. In the process, students will have "hands on" experience as well as practical understanding of the basic operation of a forensic lab.	WECM	crime ,preservation





CJSA	1400	Concepts, investigations process, scene management, required documentation, and case management for incidences of natural, accidental, and suicidal deaths. Follows the Department of Justice National Guidelines for Death Investigations and meets the criteria for academic credit recognition from the American Board of Medicolegal Death Investigators.	WECM	Justice
CJSA	1401	Concepts, investigations process, scene management, required documentation and case management for incidences of homicide, undetermined causes of death, and sudden infant death. Exploration of various federal, state, and local investigative requirements. Follows the Department of Justice National Guidelines for Death Investigations. Also meets the criteria for academic credit recognition from the American Board of Medicolegal Death Investigators.	WECM	Justice
CJSA	1348	Ethical philosophies and issues pertaining to the various professions in the criminal justice system. Includes ethical issues emanating from constitutional conflict with public protection and individual rights, civil liberties, and correctional policies.	WECM	Justice, rights, ethical, basic rights, civil society, conflict-related death
CJSA	2334	A series of lectures and class participation exercises presenting selected topics currently confronting criminal justice personnel and the public they serve.	WECM	Participation, Justice, direct participation, meaningful participation
CJSA	1392	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events





CJSA	1393	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
CJSA	1472	A forensic science lecture course focused on research in adolescent and adult neuropsychology. A study of the latest research from neuroimaging related to biological templates for violence within the brain. The psychotherapy and known offender characteristics will be analyzed and discussed. Also demonstrated are how forensic specialists analyze mens rea (criminal mind), MO (modus operandi), signature, and criminal aftermath activity as part of crime scene analysis.	WECM	violence
CJSA	1308	Introduction to the field of criminalistics. Topics include the application of scientific and technical methods in the investigation of crime including location, identification, and handling of evidence for scientific analysis.	WECM	
CJSA	1330	An introduction to cybercrime. Topics include specific laws, investigative techniques, and criminological theories applicable to computer crime.	WECM	
CJSA	1347	Study of the principles of organizational structure and administration. Topics include theories of management, motivation, and leadership. Focus on a quality approach toward police community interaction.	WECM	
CJSA	2332	A study of the practical aspects of criminalistics procedures. Topics include crime scene investigation, collecting and preserving evidence, and testifying in court.	WECM	





CMDR	2359	Capstone experience that examines the process of becoming a professional conflict specialist in multiple settings. Includes consulting and working with advocates, corporations, organizations, communities, and nations on both specific and broad conflict issues.	WECM	communities
CMDR	1312	Special characteristics of conflict based on religious, ethnic, national, or racial identity. Emphasizes cross-cultural negotiations and mediations.	WECM	cultural significance
CMDR	2371	Repeated organizational disputes lead to inefficiencies and a higher level of discord in many types of organizations including the workplace, homeowner associations, religious organizations, educational institutions, government, and many others. This course helps students learn effective dispute resolution strategies and skills to design systems that offer constructive approaches to managing organizational conflicts and using them to maximize creativity organizational development. Students will examine existing dispute resolution systems, identify important decision points, create new dispute resolution systems, or improve existing systems. Lecture, case studies, and experiential activities will expose the student to opportunities for designing dispute resolution systems.	WECM	Education, effective, Institutions, opportunities, association, representative decision-making
CMDR	1306	Examines current trends and issues in the field of conflict resolution and conflict management. Introduces methods for understanding and effectively responding to contemporary changes and challenges.	WECM	effective





CMDR	2370	This course is designed to impart fundamental knowledge about the litigation process and teach practical skills professionals need to effectively participate in mediations, arbitrations, negotiations, and dispute resolution system design. The focus will be on Texas Civil Procedure, legal reasoning and research, torts, contracts, criminal, and constitutional law. Students will receive a primer on materials and tools used by judges and lawyers to interpret the law so they can evaluate the merits of a legal dispute and better serve parties involved in litigation.	WECM	effective, civil society, corruption
CMDR	2306	A study of ethical and legal issues and principles of professional ethical practice in the mediation and conflict management field. Topics include ethics, standards of conduct, confidentiality, impartiality, self-determination, and unauthorized practice of law.	WECM	ethical, corruption, labor standards
CMDR	1324	Surveys the Texas Family Code with particular emphasis on adoption, divorce, paternity, custody, and child care.	WECM	family
CMDR	1309	Foundation course in the field of dispute resolution. Includes negotiation, mediation, and arbitration. Examines the nature of disputes and the multiple arenas in which conflict occurs. Also provides an overview of professional opportunities in dispute resolution studies.	WECM	opportunities
CMDR	2356	Skills and techniques required by Mediators. Includes planning, precautionary, and troubleshooting methods required in practice.	WECM	planning, precautionary
CMDR	2303	This particular process in the field of Dispute Resolution teaches neutral third parties the discipline to hear and render decisions. Arbitration is intended to avoid the formalities, delay, expense, and uncertainty involved in ordinary litigation.	WECM	representative decision-making, responsive decision-making





CMDR	2372	This course provides students with knowledge, skills, and strategies essential to apply the best theory and practices of conflict management in an education setting and with youth. Through lecture, discussion, and role-plays, participants will gain greater understanding, knowledge, and skills for resolving conflict in education, including implementing peer mediation programs. The use and abuse of social media and technology's impact on youths and conflict are also included in the course. Participants are introduced to the underlying models and practical skills involving mediation and conflict resolution in an educational setting.	WECM	technology
CMDR	2373	Online activity, cross boundary transactions, and the increased use of technology have created a new forum for conflict and new needs for dispute resolution professionals. This course examines the development of online dispute resolution, the challenges it poses to neutrals and system designers, and looks at the major providers, administrative agencies, and international organizations currently involved. Lecture, research, and the use of online tools will introduce students to available resources to aid the dispute resolution professional. Students will be introduced to state of the art online tools, conduct cross-boundary negotiations, and draft settlement agreements using available technology.	WECM	technology
CMDR	1300	Specific skills necessary for managing and preventing workplace disputes.	WECM	
CMDR	1315	Examines the issues involved in a divorce and meets the Texas training requirement in divorce mediation. Includes child custody, support, and property.	WECM	





CMDR	1318	The process of mediation, its history and development, and theories of conflict resolution and negotiation. Fulfills the requirements of Senate Bill 1436 for mediation training in Texas. Includes methods for successful third-party neutrality.	WECM	
CMDR	1321	Techniques necessary to break impasse and reach agreement. Includes methods for creating an atmosphere that fosters negotiation, conducting difficult conversations; and mediating "win-win" situations.	WECM	
CMDR	2164	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
CMDR	2353	Theory and techniques of negotiation. Includes analysis of the negotiation process from various perspectives. Emphasizes the preparatory activities and stages of negotiation, including reaching and implementing an agreement.	WECM	
CMSW	1353	Overview of professionally recognized family intervention systems. Topics include theorists in the field and personal awareness. Family assessments and working with the family as a system, in selecting health care services. The intergenerational concepts are introduced.	WECM	family, generation
CNBT	1372	This course is a study of the mechanical, electrical, plumbing, ventilation, and insulation systems used in residential buildings today. The student will identify and describe the major components of a heating and air conditioning system as well as the methods used in the design, planning, and installation of residential systems.	WECM	Air, planning





CNBT	1342	An examination of the building codes and standards applicable to building construction and inspection processes.	WECM	labor standards
CNBT	2344	A management course in contract documents, safety, planning, scheduling, production control, and law and labor. Topics include contracts, planning, cost and production peripheral documents, and cost and work analysis.	WECM	planning, corruption
CNBT	2270	This course is specifically geared for the construction technology professional who utilizes the shielded metal arc welding (SMAW) process. Position of welds will be 1G, 2G, 5G, and 6G using various electrodes. Topics covered include electrode selection, equipment setup, and safe shop practices.	WECM	technology
CNBT	2317	Methods and materials used for buildings that conserve energy, water, and human resources.	WECM	Water, clean energy
CNBT	1300	Introductory blueprint reading for residential and light commercial construction.	WECM	
CNBT	1301	Overview of the construction industry.	WECM	
CNBT	1302	A presentation of the basic mechanical, plumbing, and electrical components in construction and their relationship to residential and light commercial buildings.	WECM	
CNBT	1311	An introduction to construction materials and methods and their applications.	WECM	
CNBT	1315	Surveying equipment, sketches, proper field note taking, methods of staking, layout of building site, and horizontal and vertical controls.	WECM	
CNBT	1318	Comprehensive study of the selection and use of hand tools, portable and stationary power tools and related construction equipment. Emphasis on safety in the use of tools and equipment.	WECM	





CNBT	1344	Skill development in laboratory testing and field inspection procedures associated with construction materials.	VECM	
CNBT	1346	Fundamentals of estimating materials and labor costs in construction.	WECM	
CNBT	1359	A study of conventional scheduling using critical-path- method; precedence networks; bar charts; monthly reports; and fast track scheduling.	VECM	
CNBT	1374	Designed to train the construction worker in the preparation of cost estimates for residential structures. Topics include mathematics, construction techniques, estimating cycle, data sources and use, checklists, and detailed unit quantity estimating methods. Emphasis will be on establishing residential material requirements.	VECM	
CNBT	1411	An introduction to construction materials and methods and their applications.	WECM	
CNBT	2281	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience.	VECM	
CNBT	2304	Continuation of the study of the properties of building materials, methods and equipment for their integrated use in completing construction projects.	WECM	
CNBT	2305	Basic process of organizing and operating a building or contracting business.	WECM	
CNBT	2310	Blueprint reading for commercial/industrial construction.	WECM	
CNBT	2315	Overview of the legal aspects of written construction documents.	WECM	





CNBT	2335	Advanced construction scheduling utilizing computer scheduling software to perform various scheduling procedures.	WECM	
CNBT	2375	This course continues the study of field engineering for commercial and industrial building construction. Methods used in estimating materials, development of Quantity logs and pier logs, use of blueprints and field notes, parking lots, retaining systems and basic curves. Lab required.	WECM	
CNBT	2380	Career related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
CNBT	2381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience.	WECM	
CNBT	2437	Advanced estimating concepts using computer software programs for the construction and crafts.	WECM	
COMM	1318	(1st semester, journalism emphasis) (Also see ARTS 2356 for fine arts emphasis) Introduction to the basics of photography. Includes camera operation, techniques, knowledge of chemistry, and presentation skills. Emphasis on design, history, and contemporary trends as a means of developing an understanding of photographic aesthetics.	ACGM	capacity-building





COMM	1335	Study of the development, regulation, economics, social impact, and industry practices in broadcasting and cable communication. Includes non-broadcast television, new technologies, and other communication systems.	ACGM	economic
COMM	2300	Criticism and analysis of the function, role, and responsibility of the mass media in modern society from the consumer perspective. Includes the ethical problems and issues facing each media format, with the effect of political, economic, and cultural factors on the operation of the media.	ACGM	economic, ethical, cultural significance
COMM	2324	Lecture and laboratory instruction and participation.	ACGM	Participation, direct participation, meaningful participation
COMM	2330	Exploration of the history and development of public relations. Presentation of the theory behind and process of public relations, including the planning, implementation, and evaluation of PR campaigns.	ACGM	planning
COMM	1307	Study of the media by which entertainment and information messages are delivered. Includes an overview of the traditional mass media: their functions, structures, supports, and influences.	ACGM	
COMM	1316	Introduction to problems and practices of photography for newspapers, and/or fine art purposes/commercial output. Includes instruction in camera and equipment operation and maintenance, film and plate developing, digital and print media.	ACGM	
COMM	1317	Advanced problems and practices of photography for newspapers, and/or fine art purposes/commercial output. Includes instruction in camera and equipment operation and maintenance, film and plate developing, digital and print media.	ACGM	





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COMM	1319	Extends the students' knowledge of technique and guides them in developing personal outlooks toward specific applications of the photographic process.	ACGM	
COMM	1336	This course introduces the student to station organization, studio operation, and the use of studio equipment. Topics include continuity, camera operation, sound, lighting, and videotape recording. Practical experience in the operation of television studio and control room equipment, including both pre- and post-production needs.	ACGM	
COMM	1337	This course is a continuation of Communications1336. Emphasis is on the concept and technique of production of television broadcasts in practical situations. Practical experience in the operation of television studio and control room equipment, including both pre- and post-production needs.	ACGM	
COMM	2302	This course examines major issues facing the news media in a democratic society and explores journalism's role in shaping public perception and affecting policy.	ACGM	
COMM	2303	Concepts and techniques of sound production, including the coordinating and directing processes. Hands-on experience with equipment, sound sources, and direction of talent.	ACGM	
СОММ	2305	Editing and layout processes, with emphasis on accuracy and fairness, including the principles and techniques of design.	ACGM	
СОММ	2311	Fundamentals of writing news for the mass media. Includes instruction in methods and techniques for gathering, processing, and delivering news in a professional manner.	ACGM	
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COMM	2315	Continuation of the aims and objectives of news gathering and writing with emphasis on advanced reporting techniques.	ACGM
COMM	2327	Fundamentals of advertising including marketing theory and strategy, copy writing, design, and selection of media.	ACGM
СОММ	2328	Communication of ideas through processes and techniques of graphic design and illustration.	ACGM
СОММ	2329	Communication of ideas through processes and techniques of graphic design and illustration.	ACGM
COMM	2331	Principles of announcing: study of voice, diction, pronunciation and delivery. Experience in various types of announcing. Study of phonetics is recommended.	ACGM
СОММ	2332	Preparation and analysis of news styles for the electronic media.	ACGM
СОММ	2339	Introduction to basic script formats, terminology, and writing techniques, including the writing of commercials, public service announcements, promotions, news, documentary, and fictional materials.	ACGM
COMM	2366	Emphasis on the analysis of the visual and aural aspects of selected motion pictures, dramatic aspects of narrative films, and historical growth and sociological effect of film as an art.	ACGM
COMM	2389	This instructional program is designed to integrate on- campus study with practical hands-on work experience in Communication. In conjunction with class seminars, the student will set specific goals and objectives in the study of Communication.	ACGM





COSC	1301	Overview of computer systems hardware, operating systems, and microcomputer application software, including the Internet, word processing, spreadsheets, presentation graphics, and databases. Current issues such as the effect of computers on society, and the history and use of computers in business, educational, and other modern settings are also studied. This course is not intended to count toward a student's major field of study in business or computer science. This course will fulfill degree requirements established by the colleges of DCCCD only if this course has been successfully completed and the date of completion does not exceed 10 years.	ACGM	Education
COSC	1436	This course introduces the fundamental concepts of structured programming, and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course may use instructional examples and assignments form various programming languages including but not limited to C, Objective-C, C++, and/or Java. This course assumes computer literacy. (This course is included in the Field of Study Curriculum for Computer Science.) COSC 1436 will satisfy the Associate in Sciences degree general elective requirement. This course will fulfill degree requirements established by the colleges of DCCCD only if this course has been successfully completed and the date of completion does not exceed 10 years.	ACGM	literacy





1315
Introduction to computer programming for solving a variety of problems. This course is intended for non-computer science and non-computer engineering majors. Emphasis on the fundamentals of design, development, testing, implementation, and documentation of computer programs. Includes problem solving with structured techniques and algorithms using pseudo code and/or graphical representations. This course may use instructional examples and assignments from various programming languages, including but not limited to C, Objective-C, C++, C##, and/or Java. COSC 1315 will satisfy the Associate of Science degree general elective requirement. This course will fulfill degree requirements established by the colleges of DCCCD only if this course has been successfully completed and the date of completion does not exceed 10 years.
of problems. This course is intended for non-computer science and non-computer engineering majors. Emphasis on the fundamentals of design, development, testing, implementation, and documentation of computer programs. Includes problem solving with structured techniques and algorithms using pseudo code and/or graphical representations. This course may use instructional examples and assignments from various programming languages, including but not limited to C, Objective-C, C++, C##, and/or Java. COSC 1315 will satisfy the Associate of Science degree general elective requirement. This course will fulfill degree requirements established by the colleges of DCCCD only if this course has been successfully completed and the date of completion does not exceed 10
of problems. This course is intended for non-computer science and non-computer engineering majors. Emphasis on the fundamentals of design, development, testing, implementation, and documentation of computer programs. Includes problem solving with structured techniques and algorithms using pseudo code and/or graphical representations. This course may use instructional examples and assignments from various programming languages, including but not limited to C, Objective-C, C++, C##, and/or Java. COSC 1315 will satisfy the Associate of Science degree general elective requirement. This course will fulfill degree requirements established by the colleges of DCCCD only if this course has been successfully completed and the date of completion does not exceed 10
of problems. This course is intended for non-computer science and non-computer engineering majors. Emphasis on the fundamentals of design, development, testing, implementation, and documentation of computer programs. Includes problem solving with structured techniques and algorithms using pseudo code and/or graphical representations. This course may use instructional examples and assignments from various programming languages, including but not limited to C, Objective-C, C++, C##, and/or Java. COSC 1315 will satisfy the Associate of Science degree general elective requirement. This course will fulfill degree requirements established by the colleges of DCCCD only if this course has been successfully completed and the date of completion does not exceed 10





COSC	1437	This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. This course may use instructional examples and assignments form various programming languages including but not limited to C, Objective-C, C++, and/or Java. (This course is included in the Field of Study Curriculum for Computer Science.) COSC 1437 will satisfy the Associate in Sciences degree general elective requirement. This course will fulfill degree requirements established by the colleges of DCCCD only if this course has been successfully completed and the date of completion does not exceed 10 years.	ACGM	
COSC	2425	The organization of computer systems is introduced using assembly language. Topics include basic concepts of computer architecture and organization, memory hierarchy, data types, computer arithmetic, control structures, interrupt handling, instruction sets, performance metrics, and the mechanics of testing and debugging computer systems. Embedded systems and device interfacing are introduced. (This course is included in the Field of Study Curriculum for Computer Science.) COSC 2425 will satisfy the Associate in Sciences degree general elective requirement. This course will fulfill degree requirements established by the colleges of DCCCD only if this course has been successfully completed and the date of completion does not exceed 10 years.	ACGM	





COSC	2436	Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), and algorithmic analysis. This course may use instructional examples and assignments from various programming languages, including but not limited to C, Objective-C, C++, C#, and/or Java. COSC 2436 will satisfy the Associate in Sciences degree general elective requirement. This course will fulfill degree requirements established by the colleges of DCCCD only if this course has been successfully completed and the date of completion does not exceed 10 years.	ACGM	
Course Prefix	Course Number	Description	Туре	Sustainability Key Words
СРМТ	1404	In this course the students will develop skills in the installation, configuration, maintenance and troubleshooting of system software in microcomputers. Topics covered may include operating systems, utility software and other software affecting the basic operation of a microcomputer system.	WECM	capacity-building
СРМТ	1445	This course will cover functions of the components within a computer system. In this course the students will develop skills in the use of test equipment and maintenance aids. Students will study how to describe the functions of components in a computer system; use computer related test equipment; and demonstrate the effective use of maintenance tools.	WECM	effective, capacity-building





СРМТ	2302	Integration and maintenance of various home technology subsystems. Includes home automation, security and surveillance, home networks, video and audio networks, and structured wiring.	WECM	technology, security
СРМТ	2402	Integration and maintenance of various home technology subsystems. Includes home automation, security and surveillance, home networks, video and audio networks, and structured wiring.	WECM	technology, security
CPMT	1451	An introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level information and communication technology (ICT) professionals. The curriculum covers the fundamentals of PC technology, networking, and security, and also provides an introduction to advanced concepts. Hands-on labs and Virtual Laptop and Virtual Desktop learning tools help students develop critical thinking and complex problemsolving skills. Cisco Packet Tracer simulation-based learning activities promote the exploration of network and networking security concepts and allow students to experiment with network behavior.	WECM	technology, security, capacity-building
CPMT	1307	A study of the information for the assembly of a microcomputer system. Emphasis on the evolution of microprocessors and microprocessor bus structures.	WECM	
СРМТ	1403	A fundamental computer course that provides explanation of the procedures to utilize hardware and software. Emphasis on terminology, acronyms, and hands-on activities.	WECM	





СРМТ	1411	This course is an introduction to the installation, configuration, and maintenance of a microcomputer system. Students will study how to identify modules that make up a computer system and its operation; identify each type of computer bus structure; assemble/setup microcomputer systems and adapter/interface boards; and install/connect associated peripherals.	WECM	
СРМТ	1443	Computer characteristics and subsystem operations, timing, control circuits, and internal input/output controls.	WECM	
СРМТ	1447	This course is an in-depth study of principles and practices involved in computer system troubleshooting techniques, programs, and the use of specialized test equipment. The student will develop hardware and software troubleshooting techniques and perform procedures used in troubleshooting.	WECM	
СРМТ	1449	This is a beginning course in computer networks with focus on networking fundamentals, terminology, hardware, software, and network architecture. A study of local/wide area networking concepts and networking installations and operations.	WECM	
СРМТ	2433	Integration of hardware, software, and applications. Customization of computer systems for specific applications such as engineering, multimedia, or data acquisition. Integrate special applications in the areas of multimedia, data acquisition, or engineering; install and maintain various hardware and software components for specialized applications; and analyze and test system operations.	WECM	





CPMT	2445	This course covers principles and practices involved in computer system troubleshooting techniques and repair procedures including advanced diagnostic test programs and the use of specialized test equipment. The student will develop hardware and software troubleshooting techniques and perform procedures used in troubleshooting.	WECM	
CRIJ	1310	A study of the nature of criminal law is presented. The philosophical and historical development of criminal law is covered. Major definitions and concepts are given. The classification of crime is covered. The elements of crimes and penalties are discussed using Texas statutes as illustrations. Criminal responsibility is defined.	ACGM	corruption
CRIJ	2323	This course covers police authority, responsibilities, and constitutional constraints. Topics include laws of arrest, search and seizure, and police liability.	ACGM	corruption
CRIJ	1307	American crime problems are studied in the historical perspective. Social and public policy factors affecting crime are discussed. The impact of crime and crime trends are shown along with the social characteristics of specific crimes. The prevention of crime is emphasized.	ACGM	crime
CRIJ	2301	An overview of diversionary practices and treatment programs available to offenders in a local context. Topics include selected recognized models and future trends in community treatment.	ACGM	future
CRIJ	2328	Exploration of the profession of police officer. Topics include organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues.	ACGM	future, corruption





CRIJ	1313	A study of the juvenile justice process. Topics include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency.	ACGM	Justice, corruption
CRIJ	1306	The judiciary in the criminal justice system is explained. The structure of the American Court System is defined. Prosecution right to counsel is explained. Other areas covered are pretrial release, grand juries, adjudication process, and types of rules of evidence and sentencing.	ACGM	Justice, ethical
CRIJ	1301	This course is a study of history and philosophy of criminal justice including ethical considerations. Topics include the definition of crime, the nature and impact of crime, an overview of the criminal justice system, law enforcement, court system, prosecution and defense, trial process, and corrections.	ACGM	Justice, ethical, corruption, crime
CRIJ	2313	A study of the role of corrections in the criminal justice system. Topics include organization and theory of correctional systems, institutional operations, management, alternatives to institutionalization, treatments and rehabilitation, and current and future issues.	ACGM	Justice, Institutions, future, legitimate institution
CRIJ	2314	Study of investigative theory, the collection and preservation of evidence, sources of information, concepts of interviewing and interrogation, the use of forensic sciences, and trial preparation.	ACGM	Preservation
CRPT	1311	Principles of design and construction of a conventional roof system incorporating gable, hip, valley and intersections. Emphasis given to safe work practices and the use, and maintenance of tools and equipment.	WECM	





CRPT	1315	Conventional wall systems with emphasis on wood frame construction. Includes identification of components; construction of wall systems; safe work practices; and the use, and maintenance of tools and equipment.	WECM	
CRPT	1319	Skill development in the identification and erection of engineered roof systems and components. Topics include trussed, timber-framed and steel-component roof structures with emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required.	WECM	
CRPT	1325	Construction of basic form and foundation systems including related safety, tools, equipment, and building layout. Emphasis on safe work practices and the use, and maintenance of tools and equipment.	WECM	
CRPT	1341	Installation of exterior finish systems and components including the placement and installation of cornice, windows, doors, siding, and flashing. Emphasis on safe work practices and the use, and maintenance of tools and equipment.	WECM	
CRPT	1345	Installation of interior finish systems and components including the placement and installation of doors, trim, floor, wall, and ceiling finishes. Emphasis on safe work practices and the use, and maintenance of tools and equipment.	WECM	
CRPT	2331	Skill development in the layout and construction of advanced architectural roof styles and features including the construction of multi-pitched roofs, dormers, crichets, cupolas, and other roof structures. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required.	WECM	





CRPT	2339	Installation of specialty exterior finish systems and components including the placement and installation of cornice, windows, doors, siding, and flashing. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment.	WECM	
CRPT	2341	Installation of specialty interior finish systems and components including specialty floor, wall, and ceiling finishes. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment.	WECM	
CRPT	2343	Instruction in special wall systems. Topics include the identification of components and the construction of a wall system with emphasis on safe work practices and the selection, use, and maintenance of tools and equipment.	WECM	
СТМТ	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.	WECM	technology, events, capacity-building
СТМТ	267	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
СТМТ	2332	In-depth coverage of computed tomography imaging techniques. Image quality assurance and radiation protection are emphasized.	WECM	
СТМТ	2336	Skill development in the operation of computed tomographic equipment, focusing on routine protocols, image quality, and quality assurance and radiation protection.	WECM	
СТМТ	2364	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	





CVTT	1110	Basic life support, advanced cardiac life support, cardiac pharmacology, and emergency procedures as they relate to the cath lab experience.	WECM	emergency
CVTT	1360	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	Enable, technology, capacity-building
CVTT	2460	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable, technology, capacity-building
CVTT	2560	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable, technology, capacity-building
CVTT	2563	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable, technology, capacity-building
CVTT	1153	A continuation of Catheterization Lab Fundamentals I with emphasis on X-ray technology and interventional procedures in the cardiac cath lab. Focus on the beginning cath lab clinical experience.	WECM	technology
CVTT	1304	A study of the anatomy, physiology, and structural relationships of the human heart and vascular system. Focus on cardiac anatomy, electrocardiology, cardiac hemodynamics, and the innervation of the heart.	WECM	technology





CVTT	1313	Introduction to the diagnostic procedures used in the cath lab. Prior didactic instruction in cardiac physiology and medical instrumentation applied to cath lab procedures including patient preparation and monitoring, angiographic equipment set-up, and the coronary angiography procedure itself.	WECM	technology
CVTT	1471	Students study the anatomy of the peripheral vascular system and the diagnostic and interventional procedures performed in the Cardiac Catheterization Laboratory. Students review the principles of radiation safety, biological effects of ionizing radiation, darkroom and cine film principles, and digital imaging. The course also covers an intensive review of all invasive cardiovascular technology principles to assist the student in successful preparation for the RCIS credential examination.	WECM	technology
CVTT	1340	Continuation of CVTT 1304. Methods of hemodynamic data collection and implications in relation to cardiac diseases.	WECM	
CVTT	1350	A continuation of Cardiac Catheterization I. An intensive study of advanced cardiovascular diagnostic and therapeutic procedures including percutaneous transluminal coronary angioplasty and electrophysiology studies.	WECM	
DAAC	2341	Advanced examination of knowledge, skills, attitudes, techniques, confidentiality and ethical guidelines applied in the counseling, treatment, prevention, and recovery of substance use disorders.	WECM	ethical
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DAAC	2307	The family as a dynamic system focusing on the effects of addiction on family roles, rules, and behavior patterns. Includes the effects of mood altering substances, behaviors, and therapeutic alternatives as they relate to the family from a multicultural and transgenerational perspective.	WECM	family, generation
DAAC	2330	Characteristics of minorities and diverse populations encountered by counselors. Includes issues among those groups which affect the counseling process.	WECM	minorities
DAAC	1304	Psychological, physiological, and sociological effects of mood altering substances and behaviors and their implications for the addiction process are discussed. Emphasis on pharmacological effects of tolerance, dependency/withdrawal, cross addiction, and drug addiction.	WECM	substances
DAAC	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behavior pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
DAAC	1309	Exploration of procedures and tools used to identify substance-related and addictive disorders and assess a client's problems, strengths, deficits, and needs.	WECM	
DAAC	2366	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This is a work-based learning experience that helps students gain practical experience, enhanced skills, and integrated knowledge in the discipline. Direct supervision will be provided by a clinical professional. A roundtable seminar is mandatory.	WECM	
DANC	2325	An interrelationship of the physiological processes and anatomy of the human body with a respect to movement.	ACGM	bodily health





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DANC	1305	A survey of dances from different cultures, their histories, and their influences on contemporary dance and society. Cultural origins, significance, motivations and techniques will be explored experientially.	ACGM	cultural significance, local culture
DANC	1201	This introductory course in improvisation will investigate spontaneous problem solving as a means of generating movement for dance composition. Students will be called upon to explore and respond to various forms of stimuli in a safe and supportive learning environment within solo and group work.	ACGM	environment
DANC	1301	This course is an examination of the principles of movement generation, phrasing, choreographic structure, and manipulation. Integration of choreographic principles will foster the growth of personal artistic style.	ACGM	generation
DANC	1101	Development of basic principles and theories involved in composition are studied. Emphasis is placed on movement principles, group and structural forms.	ACGM	
DANC	1110	Instruction in the fundamental techniques and concepts associated with Tap dance.	ACGM	
DANC	1112	Practicum in dance related topics with emphasis on practical skills necessary for the field.	ACGM	
DANC	1113	This course consists of creative problem-solving utilizing basic elements of design, patterns and dance technique.	ACGM	
DANC	1122	This course explores basic Hip Hop styles. Emphasis is on technique development and familiarity with contemporary meters and rhythms.	ACGM	
DANC	1123	This course continues and further develops an exploration of DANC 1122.	ACGM	
DANC	1128	Introductory instruction in the fundamental techniques and concepts associated with Ballroom and Social Dance.	ACGM	
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DANC	1141	Working through the dance technique, stretching and toning of the dancer's instrument.	ACGM
DANC	1142	Continuation of DANC 1141.	ACGM
DANC	1145	This course explores basic modern techniques. Emphasis is on technique development, and familiarity with contemporary dance meters and rhythms.	ACGM
DANC	1146	This course continues and further develops an exploration of Dance 1145.	ACGM
DANC	1147	The basic skills of jazz dance are introduced. Emphasis is on technique and development, rhythm awareness, jazz styles, and rhythmic combinations of movement.	ACGM
DANC	1148	This course continues and further develops an exploration of DANC 1147.	ACGM
DANC	1151	Instruction in dance performance through experiential projects at the freshman level. May be repeated for credit once.	ACGM
DANC	1241	Instruction in the fundamental techniques and concepts associated with ballet.	ACGM
DANC	1245	Instruction in the fundamental techniques and concepts associated with the concert form of modern dance.	ACGM
DANC	1247	Instruction in the fundamental techniques and concepts associated with jazz dance.	ACGM
DANC	1341	This course explores basic ballet structure and terminology. Included are posture, balance, coordination, rhythm, and flow of physical energy through the art form. Instruction in beginning adagio, petit allegro, grand allegro, inside and outside turns and various jumps are studied.	ACGM





DANC	1342	This course is a continuation of Dance 1341. Emphasis is on body directions and stamina. More complex combinations using advanced patterning will be studied.	ACGM
DANC	1345	This course explores basic modern techniques. Emphasis is on technique development, and familiarity with contemporary meters and rhythms. An awareness of major influences on concert dance is developed.	ACGM
DANC	1346	This course continues and further develops an exploration of Dance 1345.	ACGM
DANC	2112	Practicum/Dance as a performing art background history as well as movement vocabulary included.	ACGM
DANC	2113	Continuation of DANC 2112.	ACGM
DANC	2151	Instruction in dance performance through experiential projects at the sophomore level.	ACGM
DANC	2241	Instruction in the intermediate techniques and concepts associated with ballet.	ACGM
DANC	2245	Instruction in the intermediate techniques and concepts associated with the concert form of modern dance.	ACGM
DANC	2247	Instruction in the intermediate techniques and concepts associated with jazz dance.	ACGM
DANC	2289	An instructional program designed to integrate on-campus study with hands-on work experience. In conjunction with class seminars, student will set specific goals and objectives in study of dance.	ACGM
DANC	2303	The cultural, historical and aesthetic qualities of dance are presented through lectures, films, videos, demonstrations and dance productions. Primitive, classical and contemporary dance forms are included.	ACGM





DANC	2342	This course is a more advanced exploration of concepts in patterning, rhythm, timing and energy/effort shape. This course may be repeated for credit.	ACGM	
DANC	2348	This course is a further exploration of DANC 2347.	ACGM	
DANC	2389	An instructional program designed to integrate on-campus study with hands-on work experience. In conjunction with class seminars, student will set specific goals and objectives in study of dance.	ACGM	
DEMR	1323	Introduction to heating, ventilation, and air conditioning theory, testing, and repair. Emphasis on refrigerant reclamation, safety procedures, specialized tools, and repairs.	WECM	Air
DEMR	1327	An introduction to and familiarization with components and systems related to tractor trailer service. Emphasis on records required by the Department of Transportation.	WECM	transportation
DEMR	1301	A study of shop safety, rules, basic shop tools, and test equipment.	WECM	
DEMR	1305	Basic principles of electrical systems of diesel powered equipment with emphasis on starters, alternators, and batteries.	WECM	
DEMR	1306	An introduction to the basic principles of diesel engines and systems.	WECM	
DEMR	1317	Basic principles of brake systems of diesel powered equipment. Emphasis on maintenance, repairs, and troubleshooting.	WECM	
DEMR	1321	Fundamental repair and theory of power trains including clutches, transmissions, drive shafts, and differentials. Emphasis on inspection and repair.	WECM	
DEMR	1330	A study of design, function, maintenance, and repair of steering and suspension systems. Emphasis on troubleshooting and repair of failed components.	WECM	
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DEMR	1380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
DEMR	2331	An advanced brake system course designed for diesel powered equipment. Advanced concepts and schematics including anti-lock, air, pneumatic, and hydraulic brake systems and related components.	WECM	
DFTG	2336	Emphasis on the productivity of CAD software through development of computer-aided drafting programs with emphasis on database design, access techniques, and structure methods with particular application in engineering graphics.	WECM	Access
DFTG	2380	Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	cooperation
DFTG	2313	The study of layout and design of integrated circuits. Instruction in layout technology and laboratory exercises to enable students to layout simple digital integrated circuits from schematic diagrams and design rules.	WECM	enable, technology





DFTG	2333	Implementation of advanced techniques in the design of complex integrated circuits; projects require students to use multiple sets of design rules meeting industrial standards of current technologies. Instruction in layout technology and laboratory exercises to enable students to layout complex analog integrated circuits from schematic diagrams and design rules.	WECM	enable, technology, labor standards
DFTG	2347	Advanced three-dimensional (3-D) modeling and rendering techniques using industry standard software. Includes organic modeling techniques, particle and volumetric effects, and setting up a model with weight maps, hierarchies, and constraints. Emphasizes advanced use of camera settings, lighting, and surface to create detailed environments.	WECM	Environment
DFTG	2305	An intermediate course including single-sided and double-sided printed circuit board design, emphasizing the drawings, standards, and processes required to layout printed circuit board and manufacturing documentation.	WECM	labor standards
DFTG	2328	Architectural drafting procedures, practices, and symbols including preparation of detailed working drawings for commercial buildings, with emphasis on construction methods generated using computer aided design technology.	WECM	technology
DFTG	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events





DFTG	1392	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
DFTG	1394	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
DFTG	1395	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
DFTG	1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
DFTG	1492	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.	WECM	technology, events
DFTG	1493	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
DFTG	1495	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.	WECM	technology, events





DFTG	1215	A study of the fundamentals of blueprint reading for the construction industry.	WECM	
DFTG	1309	An introduction to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinate systems, and plot/print to scale.	WECM	
DFTG	1313	Discussion of theory and practice with drafting methods and the terminology required for non-drafting majors to prepare working drawings in their occupational fields.	WECM	
DFTG	1315	The fundamentals of blueprint reading for the construction industry will be examined.	WECM	
DFTG	1325	An introduction to reading and interpreting working drawings for fabrication processes and associated trades. Use of sketching techniques to create pictorial and multiple-view drawings.	WECM	
DFTG	1329	A basic course including layout and design of electro- mechanical equipment from engineering notes and sketches. Emphasis on drawing of electronic equipment control panels, interior hardware, exterior enclosures, detailed and assembly drawings with a parts list, and flat pattern layouts.	WECM	
DFTG	1333	An intermediate course covering detail drawings with proper dimensioning and tolerances, use of sectioning techniques, common fasteners, isometrics and oblique drawings, including bill of materials.	WECM	





DFTG	1340	Topics include CAD equipment, software selection and interface; setting up a CAD workstation; upgrading a computer to run advanced CAD software; storage devices; storing, retrieving, back-up and sharing databases; file servers and local area networks (LANs); and transferring drawing files over the Internet.	WECM
DFTG	1345	Parametric-based design software for mechanical assembly design and drafting.	WECM
DFTG	1358	A study of the principles of layout of electrical and electronic drawings, stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit board layouts, motor control diagrams, power distribution diagrams, and electrical one-line diagrams.	WECM
DFTG	1405	Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes.	WECM
DFTG	1409	An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating and scaling objects, adding text and dimensions, using layers, coordinating systems; as well as input and output devices.	WECM
DFTG	1417	Architectural drafting procedures, practices, terms, and symbols. Preparation of detailed working drawings for residential structures. Emphasis on light frame construction methods.	WECM





DFTG	1425	An introduction to reading and interpreting working drawings for fabrication processes and associated trades. Use of sketching techniques to create pictorial and multiple-view drawings.	WECM
DFTG	1445	Parametric-based design software for 3D design and drafting.	WECM
DFTG	2312	Topics include pictorial drawing including isometrics, obliques, perspectives, charts, and graphs. Emphasis on rendering and using different media.	WECM
DFTG	2319	A continuation of practices and techniques used in basic computer-aided drafting including the development and use of prototype drawings, construction of pictorial drawings, extracting data, and basics of 3D.	WECM
DFTG	2321	A course in map drafting. Emphasis is given to plotting of surveyors field notes, plotting elevations, contour drawings, plan and profiles, and laying out traverses.	WECM
DFTG	2332	Advanced techniques, including the use of a customized system. Presentation of advanced drawing applications, such as three-dimensional solids modeling and linking graphic entities to external non-graphic data.	WECM
DFTG	2335	Use parametric-based software for mechanical design for advanced modeling and analysis.	WECM
DFTG	2338	A drafting course in which students participate in a comprehensive project from conception to conclusion.	WECM
DFTG	2340	A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work.	WECM





DFTG	2356	An advanced course including the layout of surface mounted components and integrated circuit modular design, emphasizing the design and drawing layouts required to produce surface mounted components and integrated circuit modular printed circuit boards.	WECM
DFTG	2381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM
DFTG	2402	Production of detail and assembly drawings of machines, threads, gears, utilizing tolerances, limit dimensioning, and surface finishes.	WECM
DFTG	2419	The fundamentals of computer aided drafting using an alternative computer aided drafting program. Emphasis is placed on drawing set-up; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects; adding text and dimensions; using layers and coordinating systems; as well as using input and output devices.	WECM
DFTG	2423	A study of pipe fittings, symbols, specifications and their applications to a piping process system. Creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics.	WECM
DFTG	2428	Architectural drafting procedures, practices, governing codes, terms and symbols including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods.	WECM
DFTG	2430	An in-depth study of drafting methods and principles used in civil engineering.	WECM





DFTG	2431	Use of architectural specific software to execute the elements required in designing standard architectural exhibits utilizing custom features to create walls, windows and specific design requirements for construction in residential/commercial and industrial architecture.	WECM	
DFTG	2432	Exploration of the use of system customization for drawing production enhancement and the principles of data manipulation. Presentation of advanced applications, such as three-dimensional objects creation and linking graphic entities to external non-graphic data.	WECM	
DFTG	2435	Use parametric based mechanical design software for mechanical assembly design and drafting.	WECM	
DFTG	2438	A drafting course in which students participate in a comprehensive project from conception to conclusion.	WECM	
DFTG	2440	A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work.	WECM	
DFTG	2445	A continuation of pipe drafting concepts building on the basic principles acquired in pipe drafting.	WECM	
DHYG	1239	Disturbances in human body development, diseases of the body, and disease prevention measures with emphasis on the oral cavity and associated structures.	WECM	bodily health
DHYG	1315	The principles and concepts of community public health and dental health education emphasizing community assessment, educational planning, implementation, and evaluation including methods and materials used in teaching dental health education in various community settings.	WECM	Education, planning





DHYG	1161	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
DHYG	1260	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
DHYG	2361	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
DHYG	2363	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
DHYG	1311	Normal and diseased periodontium including the structural, functional, and environmental factors. Emphasis on etiology, pathology, treatment modalities, and therapeutic and preventive periodontics.	WECM	environment
DHYG	1431	Foundational knowledge for performing clinical skills on patients with emphasis on procedures and rationale for performing dental hygiene care. Introduction to ethical principles as they apply to dental hygiene care.	WECM	ethical
DHYG	2153	Emphasis on the laws governing the practice of dentistry and dental hygiene, moral standards, and the ethical standards established by the dental hygiene profession. Practice settings for the dental hygienist, office operations, and preparation for employment.	WECM	ethical, employment, corruption, moral and spiritual education
DHYG	1207	General nutrition and nutritional biochemistry emphasizing the effect nutrition has on oral health.	WECM	undernourishment





DHYG	1219	Physical and chemical properties of dental materials including the application and manipulation of the various materials used in dentistry.	WECM
DHYG	1227	The role of the dental hygienist as a therapeutic oral health care provider with emphasis on concepts of disease management, health promotion, communication, and behavior modification.	WECM
DHYG	1235	Classification of drugs and their uses, actions, interactions, side effects, contraindications, with emphasis on dental applications.	WECM
DHYG	1301	The histology and embryology of oral tissues, gross anatomy of the head and neck, tooth morphology, and individual tooth identification.	WECM
DHYG	1304	Fundamentals of oral radiography, including techniques, interpretation, quality assurance, and ethics.	WECM
DHYG	2201	Dental hygiene care for the medically or dentally compromised patient including supplemental instrumentation techniques.	WECM
DHYG	2231	A continuation of Dental Hygiene Care I. Dental hygiene care for the medically or dentally compromised patient including advanced instrumentation techniques.	WECM
DIRW	115	Continued integration of critical reading and academic writing skills are emphasized along with just-in-time support. Successful completion of this course fulfills TSI requirements for reading and/or writing.	ACGM
DIRW	305	Integration of critical reading and academic writing skills. Successful completion of this course taught at the lower level allows students to progress to the upper (exit) level.	ACGM
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DIRW	310	Continued integration of critical reading and academic writing skills. Successful completion of this course if taught at the upper (exit) level fulfills TSI requirements for reading and/or writing.	ACGM	
DIRW	315	Continued integration of critical reading and academic writing skills are emphasized along with just-in-time support. Successful completion of this course fulfills the TSI requirements for reading and/or writing.	ACGM	
DMAT	115	This course is a study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations.	ACGM	equal, expression
DMAT	310	This course is a study of relations and functions with special emphasis on linear and quadratic expressions and equations, including complex solutions. Also covered are absolute value, polynomial, radical and rational expressions and equations, and linear and absolute value inequalities.	ACGM	equal, expression
DMAT	315	This course is a study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations.	ACGM	equal, expression
DMAT	305	The course supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving.	ACGM	technology





DMAT	117	The course supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving.	ACGM	technology, numeracy
DMAT	307	The course supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving.	ACGM	technology, numeracy
DMAT	317	The course supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving.	ACGM	technology, numeracy
DMAT	407	This course covers concepts and methods of statistics with an emphasis on data collection and descriptive statistics. Topics include methods for collecting data, graphical and numerical descriptive statistics, correlation, simple linear regression, and basic concepts of probability.	ACGM	
DMSO	1351	Sectional anatomy of the male and female body. Includes anatomical relationships or organs vascular structures and body planes and quadrants.	WECM	bodily health





DMSO	2405	Detailed study of the pelvis and obstetrics/gynecology as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols.	WECM	Ecology
DMSO	2262	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
DMSO	2263	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
DMSO	1110	An introduction to the profession of sonography and the role of the sonographer. Emphasis on medical terminology, ethical/legal aspects, written and verbal communication, and professional issues relating to registry, accreditation, professional organizations and history of the profession.	WECM	ethical
DMSO	2130	Knowledge, skills and professional values within a legal and ethical framework addressing emerging technologies and professional development.	WECM	ethical
DMSO	2343	Theory and application of ultrasound principles. Including advances in ultrasound technology.	WECM	technology
DMSO	1101	Scanning techniques. Includes scan protocols and procedures within the laboratory setting utilizing live scanning and/or simulated experience.	WECM	
DMSO	1355	Pathology and pathophysiology of the abdominal structures visualized with ultrasound. Includes abdomen and pelvis.	WECM	





DMSO	1366	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
DMSO	1367	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
DMSO	1441	Normal anatomy and physiology of the abdominal and pelvic cavities as related to scanning techniques, transducer selection and scanning protocols.	WECM	
DMSO	2253	Detailed study of normal and pathological superficial structures as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols.	WECM	
DMSO	2341	Pathologies and disease states of the abdomen and pelvis as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Emphasizes endocavitary sonographic anatomy and procedures including pregnancy.	WECM	
DMSO	2345	Exploration of advanced sonographic procedures and emerging ultrasound applications.	WECM	
DMSO	2366	Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student.	WECM	
DMSO	2367	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
DRAM	1330	The technical aspects of play production are studied. Topics include shop procedures, the planning and fabrication of scenic elements, and backstage operations.	ACGM	planning





DRAM	1310	The various aspects of theater are surveyed. Topics include plays, playwrights, directing, acting, theaters, artists, and technicians.	ACGM	rights
DRAM	1120	Practicum in theater with emphasis on technique and procedures with experience gained in play productions.	ACGM	
DRAM	1121	Practicum in theater with emphasis on technique and procedures with experience gained in play productions.	ACGM	
DRAM	1142	Principles and techniques of costume design and construction for theatrical productions.	ACGM	
DRAM	1322	Movement is studied as both a pure form and as it is used in all theatrical styles, and in the development of characterization.	ACGM	
DRAM	1341	The craft of makeup is explored. Both theory and practice are included.	ACGM	
DRAM	1342	Principles and techniques of costume design and construction for theatrical productions.	ACGM	
DRAM	1351	The theory of acting and various exercises are presented. Body control, voice, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied.	ACGM	
DRAM	1352	This course is a continuation of DRAM 1351. Emphasis is on characterization and ensemble acting.	ACGM	
DRAM	2120	Practicum in theater with emphasis on technique and procedures with experience gained in play productions.	ACGM	
DRAM	2121	Practicum in theater with emphasis on technique and procedures with experience gained in play productions.	ACGM	





DRAM	2289	An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of drama.	ACGM	
DRAM	2331	Emphasis is placed on the design process and individual projects.	ACGM	
DRAM	2336	Emphasis is on improving voice and pronunciation.	ACGM	
DRAM	2351	Emphasis is on the study, rehearsal and performance of selected scenes of various periods and styles.	ACGM	
DRAM	2361	Drama is surveyed from its beginning through the 16th century. The theatre is studied in each period as a part of the total culture of the period.	ACGM	
DRAM	2362	Drama is surveyed from the 17th century through the 20th century. The theatre is studied in each period as a part of the total culture of the period.	ACGM	
DRAM	2366	Emphasis on the analysis of the visual and aural aspects of selected motion pictures, dramatic aspects of narrative films, and historical growth and sociological effect of film as an art.	ACGM	
DRCM	2170	Students obtain field experience conducting mediations, and dealing effectively with conflict management situations. They practice in-takes, role-play, develop marketing strategies, as well as other practical skills necessary to become a successful mediator and conflict resolver.	WECM	effective





DRCM	2179	Students obtain field experience conducting mediations and dealing effectively with conflict management situations. They practice in-takes, role-play, develop marketing strategies, as well as other practical skills necessary to become a successful mediator and conflict resolver.	WECM	effective
DREA	305	This course continues the development of reading comprehension and vocabulary skills. Study skills are also included.	ACGM	
DSAE	1164	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	association
DSAE	1165	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	association
DSAE	1270	An introduction to echocardiography including 2D, M-mode, spectral and color Doppler, standard echocardiographic views and measurements for each modality. Includes image orientation, scan techniques for each view and normal anatomical structures and patient positioning.	WECM	association
DSAE	1464	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	association
DSAE	1465	Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student.	WECM	association
DSAE	2235	Instruction in advanced echocardiographic procedures. Topics include stress echo, related diagnostic imaging, and related noninvasive cardiac testing.	WECM	association





DSAE	2303	Cardiac embryology, fetal circulation and cardiac congenital disease including anomalies of cardiac position, venous return, A-V valves, atria and ventricles. Emphasis placed on defect anatomy and hemodynamic consequences and the surgical repair or other treatment option associated with each anomaly. Echocardiographic imaging in the pre and post-surgical patient will be covered.	WECM	association
DSAE	2304	An emphasis on adult acquired cardiac pathologies. Topics include cardiovascular pathophysiology, quantitative measurements, and the application of 2-D, M-Mode, and Doppler. Recognition of the sonographic appearances of cardiovascular disease is stressed.	WECM	association
DSAE	2337	A continuation of Echocardiographic Evaluation of Pathology I with emphasis on cardiac disease. A discussion of quantitative measurements and application of 2-D, M-Mode, Doppler, and recognition of the sonographic appearances of cardiac disease is stressed.	WECM	association
DSAE	2464	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	association
DSAE	2465	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	association
DSAE	2660	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable





DSAE	2661	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
DSAE	2355	Knowledge, skills and professional values within a legal and ethical context addressing emerging technologies and professional development as it relates to the field of echocardiography. Ergonomic techniques and equipment applications associated with technological advances in the field of echocardiography. Registry review techniques and registry preparedness.	WECM	preparedness, ethical
DSAE	2255	Knowledge, skills, and professional values within a legal and ethical context addressing emerging technologies and professional development as it relates to the field of echocardiography. Ergonomic techniques and equipment applications associated with technological advances in the field of echocardiography. Registry review techniques and registry preparedness.	WECM	preparedness, ethical, association
DSAE	1203	An introduction to scanning techniques and procedures with hands-on experience in a lab setting. Emphasis is placed on the sonographic evaluation of the normal adult heart.	WECM	
DSAE	2335	Advanced echocardiographic procedures. Topics include stress echo, related diagnostic imaging, and related noninvasive cardiac testing.	WECM	
DSAE	2404	Adult acquired cardiac pathologies. Topics include cardiovascular pathophysiology, quantitative measurements, and the application of 2-D, M-Mode, and Doppler. Recognition of the sonographic appearances of cardiovascular disease is stressed.	WECM	





DSAE	2437	A continuation of Echocardiographic Evaluation of Pathology I with emphasis on cardiac disease. A discussion of quantitative measurements and application of 2-D, M-Mode, Doppler and recognition of the sonographic appearances of cardiac disease is stressed.	WECM	
DSPE	2253	Advanced pediatric echocardiographic procedures including: 12-lead EKG interpretation, transesophageal echocardiography, the use of contrast, intra-operative and interventional techniques. Considerations associated with intensive care of the pediatric patient will be addresses and includes intracardiac monitoring lines, and other accessories of the post-operative patient, pharmacological treatments, and other therapies.	WECM	Access, association
DSPE	2660	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
DSPE	2661	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
DSPE	2353	Advanced pediatric echocardiographic procedures including: 12 lead EKG interpretation, transesophageal echocardiography, the use of contrast, intra-operative and interventional techniques. Considerations associated with intensive care of the pediatric patient will be addressed and includes; intracardiac monitoring lines and other accessories of the post-operative patient, pharmacological treatments, and other therapies.	WECM	





DSPE	2405	Cardiac embryology, fetal circulation and cardiac congenital disease including anomalies of cardiac position, venous return, A-V valves, atria and ventricles. Emphasis placed on defect anatomy and hemodynamic consequences and the surgical repair or other treatment option associated with each anomaly. Echocardiographic imaging in the pre and post-surgical patient will be covered.	WECM	
DSPE	2447	Study of cardiac congenital anomalies of the cono-truncus, aortic arch and broncho-pulmonary circuit. Cardiac tumors, non-neoplastic intra and extra cardiac masses, pericardial and pediatric acquired cardiovascular disease will be covered.	WECM	
DSVT	1200	Introduction to non-invasive vascular technology modalities. Includes 2-D imaging, Doppler, plethysmography, and segmental pressures. Emphasis on performing basic venous and arterial imaging and non-imaging exams.	WECM	technology
DSVT	2200	Non-invasive vascular technology. Includes 2-D imaging, Doppler, plethysmography, and segmental pressures. Emphasizes protocols for performing basic venous and arterial imaging and non-imaging exams.	WECM	technology
DSVT	2367	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
DWRI	305	This course focuses on the writing process. Course topics include inventing, drafting, revising, and editing multiparagraph papers. Building reading skills, using resources, developing thinking skills, and improving attitudes toward writing comprise other course topics. A learning lab is available to provide additional assistance.	ACGM	resources





ECOL	1305		ACGM	
		A survey of basic economic concepts is presented. Topics include supply and demand, consumer behavior, price and output decisions by firms, market structures, factor markets, market failures, and international trade. An emphasis is also given to national income, unemployment, inflation, business cycles, aggregate supply and demand, monetary and fiscal policy, and economic growth. This course may also serve as preparation for the Principles of Economics courses, Economics 2301 and Economics 2302.		environment, planning, clean energy, disaster, pollution ,protect, reverence for life, unemployment
ECON	2301	An introduction to principles of macroeconomics is presented. Economic principles are studied within the historical framework of classical, Keynesian, monetarist and alternative models. Emphasis is given to national income determination, money and banking, and the role of monetary and fiscal policy in economic stabilization and growth. Other topics include international trade and finance.	ACGM	economic
ECON	2302	The principles of microeconomics are presented. Topics include the theory of demand, supply, and price of factors. Income distribution and theory of the firm are also included. Emphasis is given to microeconomic applications of international trade and finance as well as other contemporary microeconomic problems.	ACGM	economic





ECON	1301	A survey of basic economic concepts is presented. Topics include supply and demand, consumer behavior, price and output decisions by firms, market structures, factor markets, market failures, and international trade. An emphasis is also given to national income, unemployment, inflation, business cycles, aggregate supply and demand, monetary and fiscal policy, and economic growth. This course may also serve as preparation for the Principles of Economics courses, Economics 2301 and Economics 2302.	ACGM	economic, employment, unemployment
ECRD	1211	Fundamentals of cardiovascular anatomy and physiology. Includes basic electrocardiography procedures, interpretation of basic dysrhythmias, and appropriate treatment modalities.	WECM	
EDTC	1321	A capstone course in the core techniques of bilingual education. Topics include teaching techniques, awareness of cultural diversity, historical and philosophical concepts of bilingual/bicultural education, and material development.	WECM	cultural diversity, cultural significance, culture of tolerance
EDTC	1325	Examination of cultural variations found in our society and reflected in our pluralistic classrooms. Topics include culturally influenced behavior, major cultures, cultural diversity, and the process of intercultural communication and teaching, including differences in lifestyles, communication styles, learning styles, and various sources of stress for diverse cultural groups.	WECM	cultural diversity, cultural significance, culture of tolerance, local culture
EDTC	1150	In-depth coverage of portfolio development for educational personnel based on past and present field experiences in educational settings. Focus is on reflection of best practices and current trends.	WECM	Education





EDTC	1250	In-depth coverage of portfolio development for educational personnel based on past and current field experiences in educational settings. Focus is on best practices and current trends.	WECM	Education
EDTC	1301	A study of the role and responsibility of the instructional teacher assistant with emphasis on development of professionalism and effective communication strategies with adults. Topics include the various code of ethics governing the educational field, the issue of confidentiality, learner's rights and responsibilities, and challenges facing schools.	WECM	effective, rights, basic rights, responsibility, responsible
EDTC	2317	A study of developmentally appropriate direct and indirect guidance techniques for use in various school environments. Topics include identification of causes of inappropriate behavior, establishing and managing routines, the environment's role in promoting positive behavior, promoting self-esteem negotiation/conflict resolution strategies, and enhancing positive self-direction. Emphasis in implementation of a behavior management plan.	WECM	environment
EDTC	1307	Fundamental concepts and principles of reading instruction. Topics include readiness, beginning reading instruction, how literacy emerges, classroom learning environments, word-attach skills, study skills, comprehension, other aspects of the reading program, and examination of varied materials and techniques for teaching reading.	WECM	environment, literacy





2305	In-depth coverage of reading difficulties. Emphasis on the theories, strategies, recognition, and remediation of reading problems. Topics include assessment, direct instruction, and motivational/interactive literacy activities.	WECM	literacy
1313	Introduction to the use of educational software, instructional applications, and technology in the educational setting. Evaluate the use of technology for guided practice and self-paced student remediation.	WECM	technology
1341	Examination of specialization educational technology. Topics include the integration of educational computer terminology, systems operations, software, and multimedia in the contemporary classroom environment.	WECM	technology, environment
1194	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
1294	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
1394	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
	1313 1341 1194 1294	theories, strategies, recognition, and remediation of reading problems. Topics include assessment, direct instruction, and motivational/interactive literacy activities. Introduction to the use of educational software, instructional applications, and technology in the educational setting. Evaluate the use of technology for guided practice and self-paced student remediation. Examination of specialization educational technology. Topics include the integration of educational computer terminology, systems operations, software, and multimedia in the contemporary classroom environment. Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	theories, strategies, recognition, and remediation of reading problems. Topics include assessment, direct instruction, and motivational/interactive literacy activities. 1313 Introduction to the use of educational software, instructional applications, and technology in the educational setting. Evaluate the use of technology for guided practice and self-paced student remediation. 1341 Examination of specialization educational technology. Topics include the integration of educational computer terminology, systems operations, software, and multimedia in the contemporary classroom environment. 1194 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1294 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1391 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1394 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1394 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional





EDTC	1164	Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.	WECM	
EDTC	1165	Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.	WECM	
EDTC	1364	Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.	WECM	
EDTC	1365	Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.	WECM	





EDUC	2301	An enriched, integrated pre-service course and content experience that provides an overview of schooling and classrooms from the perspectives of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning. The course provides students with opportunities to participate in early field observations of P-12 special populations and should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Must include a minimum of 16-contact hours of field experience in P-12 classrooms with special populations.	ACGM	economic, opportunities, equity, gender
EDUC	1301	An enriched, integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields. The course provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations and provides students with support from college and school faculty, preferably in small cohort groups, for the purpose of introduction to and analysis of the culture of schooling and classrooms. Course content should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Course must include a minimum of 16-contact hours of field experience in P-12 classrooms.	ACGM	Institutions, opportunities, labor standards, legitimate institution, local culture





EDUC	1300	This interdisciplinary course addresses (1) research and theory in learning, cognition, and motivation; (2) factors that impact learning; and (3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply learning skills discussed in the course. Students developing these skills should be able to continually draw from the theoretical models. Critical thinking serves as the foundation for different thematic approaches using a variety of academic disciplines.	ACGM	
EECT	2437	Principles of wireless/cellular telephony systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment and access protocol.	WECM	Access
EECT	1491	Introduction to the use of structured wiring systems to provide access and versatility to configure wiring topologies in a business or home environment. Design, install, and test the various subsystems available to the technology for today's high-tech business or home. Manage existing and emerging technologies in a business or home and establish a modular infrastructure for future innovations that will not only increase current value, but ensure its long-term viability.	WECM	Access, technology, environment, future, rural infrastructure





EECT	2380	Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	cooperation
EECT	2381	Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	cooperation
EECT	2388	A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.	WECM	enable
EECT	1300	General principles of customer service within a technical environment. Topics include internal/external customer relationships, time-management, best practices, and verbal and non-verbal communications skills.	WECM	environment
EECT	1403	An overview of the telecommunications industry. Topics include the history of the telecommunications industry, terminology, rules and regulations and industry standards and protocols.	WECM	labor standards





EECT	1191	Topics in this course address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
EECT	1291	Topics in this course address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
EECT	1391	Topics in this course address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
EECT	1104	The theory of tools and equipment for electronic soldering techniques. The student will select and use appropriate soldering tools and equipment, demonstrate proper soldering techniques, and practice safety procedures. Emphasis will be primarily on terminal and printed circuit board through-hole soldering.	WECM	
EECT	1204	The theory of tools and equipment for electronic soldering techniques. The student will select and use appropriate soldering tools and equipment, demonstrate proper soldering techniques, and practice safety procedures. Emphasis will be on surface-mount soldering techniques.	WECM	
EECT	1307	A study of telecommunications convergence technologies including telephone, LAN, WAN, wireless, voice, video, and internet protocol.	WECM	
EECT	1407	A study of telecommunications convergence technologies including telephone, LAN, WAN, wireless, voice, video, and internet protocol.	WECM	





EECT	1408	Design, integration, setup, testing, and maintenance of various residential and small business subsystems, including industry documentation.	WECM
EECT	1440	Fundamentals of telecommunications media, including installation, maintenance, and troubleshooting. Topics address media characteristics and connectorization.	WECM
EECT	1444	A survey of telecommunications broadband transmissions systems including protocols, testing, applications and safety practices.	WECM
EECT	2337	Principles of wireless/cellular telephony systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment and access protocol.	WECM
EECT	2366	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM
EECT	2430	The operation of telecommunications switching equipment and related software. Topics include installation, testing, maintenance, and troubleshooting.	WECM
EECT	2432	The study of signaling schemes in telecommunications. Topics include circuits and systems necessary to implement signaling protocols, conversions and formats. Also included is the study of the history of signaling schemes.	WECM
EECT	2433	A study of installation and maintenance systems including telephone set, public switched networks, local exchanges, networks, two and four wire systems, tip and ringing requirements, and digital transmission techniques.	WECM





EECT	2435	A study of modern telecommunications systems incorporating microwave, satellite, optical, and wire/cable-based communications systems. Instruction in installation, testing, and maintenance of communications systems components.	WECM	
EECT	2439	This course is a study of communications systems with emphasis on amplitude modulation, frequency modulation, phase modulation, and digital pulse modulation. Discussion of several types of modulators, demodulators, receivers, transmitters, and transceivers. The student will describe the operation of communications receivers and transmitters; measure and troubleshoot communications systems; and describe the use of microwave receivers used in down-links in communications and the geographical regional transponder relationships used to communicate by cell phone.	WECM	
EEIR	1307	A study of the maintenance, troubleshooting, and repair of security systems. Emphasis on the installation of security systems with supervision. Lab required.	WECM	security
EEIR	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
EEIR	1311	A study of the television receiver system blocks emphasizing the identification of the fundamental waveforms and including the examination of the audio circuit.	WECM	





ELMT	1301	An introduction to programmable logic controllers as used in industrial environments including basic concepts, programming, applications, troubleshooting of ladder logic, and interfacing of equipment. Students will explain terminology; select hardware components; predict PLC operation based on ladder logic diagrams; program a PLC to perform various control functions.	WECM	environment
ELMT	2239	Advanced applications of programmable logic controllers as used in industrial environments including concepts of programming, industrial applications, troubleshooting ladder logic, and interfacing to equipment.	WECM	environment
ELMT	2471	A study of residential and commercial business solar and wind turbine on site power generation. The course will emphasize the electrical/electronic skills needed for the installation and service/repair of such alternative energy systems. Hands-on lab experiences in installation processes will be part of the course.	WECM	generation, clean energy
ELMT	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ELMT	1402	Design and installation of solar photovoltaic systems and their applications.	WECM	
ELMT	1405	Basic fluid power course covering pneumatic and hydraulic systems, fluid power symbols, operating theory, components, and basic electrical and manual controls.	WECM	
ELMT	1411	Study of heat transference, motors, pumps and other mechanical devices; solid state switches; photovoltaic plates and energy conversion; thermal dynamics; and solar energy.	WECM	
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ELMT	2433	This course is a study of devices, circuits, and systems primarily used in automated manufacturing and/or process control including computer controls and interfacing between mechanical, electrical, electronic, and computer equipment. Presentation of programming schemes. The student will describe how electronic input and output circuits are used to control automated manufacturing and/or process systems; identify basic elements used for input, output, timing, and control; define how programmable electronic systems use input data to alter output responses; troubleshoot a representative system; and demonstrate how system operation can be altered with software programming.	WECM	
ELPT	1329	Wiring methods for single family and multi-family dwellings. Includes load calculations, service entrance sizing, proper grounding techniques, and associated safety procedures.	WECM	family
ELPT	1325	An introductory study of the National Electric Code (NEC) for those employed in fields requiring knowledge of the Code. Emphasis on wiring design, protection, methods, and materials; equipment for general use; and basic calculations.	WECM	local materials
ELPT	2437	Planning and estimating for residential, commercial, and industrial wiring systems. Includes a variety of electrical techniques.	WECM	planning
ELPT	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events





ELPT	1215	Introduction to mathematical applications utilized to solve problems in the electrical field. Topics include fractions, decimals, percentages, simple equations, ratio and proportion, unit conversions, and applied geometry.	WECM
ELPT	1221	Basic theory and practice of electrical circuits. Includes calculations as applied to alternating and direct current.	WECM
ELPT	1311	Basic theory and practice of electrical circuits. Includes calculations as applied to alternating and direct current.	WECM
ELPT	1319	An introduction to basic direct current (DC) theory including electron theory and direct current applications. Lab required.	WECM
ELPT	1320	Introduces alternating current (AC). Includes AC voltage, frequency, mechanical and electrical degrees, waveforms, resistors, capacitors, and inductors. Basic theory and practice of electrical circuits. Includes calculations as applied to alternating and direct current.	WECM
ELPT	1321	Safety rules and regulations. Includes the selection, inspection, use, and maintenance of common tools for electricians.	WECM
ELPT	1341	Operating principles of solid-state and conventional controls along with their practical applications. Includes braking, jogging, plugging, safety interlocks, wiring, and schematic diagram interpretations	WECM
ELPT	1345	Commercial wiring methods. Includes overcurrent protection, raceway panel board installation, proper grounding techniques, and associated safety procedures.	WECM
ELPT	1351	Direct current (DC) motors, single-phase and polyphase alternating current (AC) motors, generators, and alternators. Emphasis on construction, characteristics, efficiencies, starting, and speed control.	WECM





ELPT	1357	Wiring methods used for industrial installations. Includes motor circuits, raceway and bus way installations, proper grounding techniques, and associated safety procedures.	WECM	
ELPT	1370	Blueprint reading covering the theory of projection, architectural and engineering symbols, relationship of views, and measuring with as they relate to the electrical construction industry.	WECM	
ELPT	1411	Basic theory and practice of electrical circuits. Includes calculations as applied to alternating and direct current.	WECM	
ELPT	1441	Operating principles of solid-state and conventional controls along with their practical applications. Includes braking, jogging, plugging, safety interlocks, wiring, and schematic diagram interpretations.	WECM	
ELPT	2419	Fundamental concepts of programmable logic controllers, principles of operation, and numbering systems as applied to electrical controls. Students will identify and describe digital logic circuits and explain numbering systems; explain the operation of programmable logic controllers; convert ladder diagrams into programs; incorporate timers and counters utilizing programmable logic controllers; and execute and evaluate programs.	WECM	
ELPT	2443	Electrical design of commercial and/or industrial projects including building layout, types of equipment, placement, sizing of electrical equipment, and all electrical calculations according to the requirements of the National Electrical Code (NEC).	WECM	





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ELTN	1470	This course sets the basics for the study of electricity as used in the electrical construction industry. The structure of matter, the electron theory, and magnetism lead into the study of the sources and effects of electricity. Electrical Math is the foundation for the calculation and study of the various laws of electrical circuits as these laws are applied to the performance of pressure, flow and resistance in series and parallel circuits used in the electrical construction industry. This course also covers an orientation of apprenticeship in the electrical construction industry, including safety, OSHA regulations and requirements for the electrical construction industry. Basic electrician's tools and electrical materials, wire (including types, sizes, and insulations) and various wiring methods are also covered. An introduction to the NEC as to terminology, definitions, and applications is covered followed by the uses and limitations of the NEC wiring methods.	WECM	corruption, local materials
ELTN	1475	This course covers the motors an electrical construction electrician will install. Some of the topics are: principles of operation, various types of single and three phase motors, along with the NEC for motors. An informational lesson of construction economics is included. The NEC hazardous locations are a part of this course. This course follows up course ELPT 1474 as it covers motor control wiring, diagrams, schematic diagram reading, control circuit development, analysis, and troubleshooting, with specialized applications of control circuits. Also wiring and piping layouts for control circuits are covered.	WECM	economic





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ELTN	1473	This course picks up where course ELPT 1472 ended with power factor and starts on power factor problems and corrections. Series parallel LCR circuit calculations and uses are covered. Also, lighting types, uses, principles of operation, and applications of the NEC to lighting installations is studied. This course also teaches electrical construction precision conduit bending as installed in an electrical installation. An introduction to motor controls, refrigeration, and air conditioning is presented in preparation for future motor controls. The Assembly of the NEC is a study of the way the NEC is put together, how to make NEC interpretations with job situations and applications.	WECM	future
ELTN	1471	Electrical sources, such as batteries and generators are studied in this course. Starting with the principles of generation and progressing through direct current generators, alternating current generators, and into the basics of direct current motors. There is also included a simple introduction to alternating current circuits and systems in the course. This course also covers an orientation as to the Apprenticeship Committee's operations and the sponsoring organizations. On-the-job safety is covered. The basics of blueprints and progressing into residential blueprints and the NEC concerning residential installations are covered. An exposure is given to grounding, fuses, overcurrent protection, and lighting for a deeper study later.	WECM	generation
ELTN	1380	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Lab required.	WECM	technology, events





ELTN	1381	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Lab required.	WECM	technology, events
ELTN	1343	Maintenance, operation, troubleshooting, and repair of circuits of various residential, commercial, and industrial electrical systems.	WECM	
ELTN	1472	This course will cover alternating current circuits, terminology, characteristics and components. AC circuits components will include inductance, inductive reactance, capacitance, capacitive reactance, impedance, and power factor. Also including AC circuit calculations. Various types of sketching and drawing are covered in this lesson before going on to the study of small commercial blueprints and installations. Special construction situations are covered in motor drives, rigging, fastening devices, safety, electrical shock, and safety for electrical shock. The electrical testing part of the course will cover rectifiers, DC meters, and AC meters. Information on parliamentary procedures and conducting a meeting are also covered.	WECM	





ELTN	1474	The apprentice will receive from this course an understanding of the transformers as installed by the construction electricians. The theory of operation, types, polarity, construction, uses, and various transformer connections will be covered. Electrical distribution systems are also covered. This course also consists of the apprentice using a complete set of blueprints of a multistoried building along with the specifications for the particular installation. Electrical controls, including fire alarms and motor controls will be covered. Motor controls start from the basic equipment and circuits and progress	WECM	
ELTN	1476	This course begins the study of electronics including the electron theory of vacuum tubes, rectifiers, power supplies, and amplifiers. Semiconductors, transistors, and transistor circuits are also covered. This course is a continuing study of the blueprints and specifications started in course ELPT 1474 with special consideration given to the study of the electrical installation. The metric system is covered. Electrical constructions installations of instrumentation equipment is covered. Instrumentation covers the recognition, applications, and characteristics of temperature, pressure, and flow controls and equipment. On-the-job relationships and leadership are presented along with OSHA safety in preparation for the apprentice to take over as a journeyman. Nuclear energy and nuclear energy safety are studied also.	WECM	





ELTN	1477	This course takes up where course ELPT 1476 ended. Static control elements, logic circuits and their application in the electrical construction industry are studied. NEC calculations involving raceway fills, box sizes with various conductors, code tables, and transformer loads are part of the course. This course consists of an in-depth study of the NEC. It will include recent changes in the NEC, electrical material limitations, electrical installation support requirements, exceptions to the Code, and special applications and situations. This course prepares the student for the journeyman examination as required by most cities.	WECM	
ELTN	1478	This course will stress high voltage cables including testing, safety, insulation and fault location. Also included will be the study of basic air conditioning systems operation, wiring, and trouble shooting. In addition, the National Electrical Code will be studied including calculations for electrical branch circuits, and motors. It will also include the study of transformers relative to their operation, diagrams, calculations, and connections.	WECM	
ELTN	479	This course is devoted to programmable controllers. Topics include the basic hardware, processors, numbering systems, ladder diagrams, relays, timers, programming, and troubleshooting. The course will also cover fire alarm systems. Diagrams, wiring connections, operation, and troubleshooting of each type of system will be included.	WECM	





EMSP	2444	A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with cardiac emergencies. In addition to the anatomy, physiology, and pathology of a cardiac crisis, it includes dysrhythmia recognition and 12 Lead ECG interpretation for field diagnosis, as well as pharmacological and electrical interventions for treatment. This course is cross-listed as EMSP 2544. The student may register for either EMSP 2444 or EMSP 2544, but may	WECM	
EMSP	2137	receive credit for only one of the two. A skills-laboratory based learning experience concentrating on the practice of medical skills and application of critical thinking abilities. Topics include a variety of skills appropriate to the student's training level. Required verifications of specific skills may be included.	WECM	association emergency
EMSP	2206	An introduction to pharmacology with emphasis placed on drug administration for medical emergencies. Topics include actions, interactions, adverse effects, implications of drug classifications, and the roles and responsibilities of the EMS professional in the safe administration of medications.	WECM	emergency





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EMSP	2471	Applied clinical human anatomy and physiology designed specifically to prepare Paramedics in determining proper care plans of critical care injuries and medical emergencies. Normal and abnormal anatomy and physiology will be covered with a focus on how disease and trauma impacts the digestive, respiratory, cardiovascular, lymphatic/immune, renal/excretory, endocrine, reproductive, skeletal and muscular systems. Labs will simulate field conditions where knowledge gained can be applied to emergency medical treatments necessary to achieve homeostasis.	WECM	emergency
EMSP	2553	Preparation of the R.N., R.R.T., or P.A. (licensed to practice in Texas) for Emergency Medical Services (EMS) certification. Students must meet program documentary requirements. Students must meet Department of State Health Services (DSHS) listed requirements to be eligible to apply for certification as a Paramedic.	WECM	emergency
EMSP	1305	The course covers the knowledge and skills for basic emergency medical care. Emphasis is on requirements of nation and state accrediting agencies. Preparation for certification as an Emergency Care Attendant (ECA)/Emergency Medical Responder (EMR).	WECM	emergency, association
EMSP	1338	Fundamental elements associated with emergency medical services to include preparatory practices, pathophysiology, medication administration and related topics.	WECM	emergency, association
EMSP	1355	Knowledge and skills in the assessment and management of patients with traumatic injuries.	WECM	emergency, association
EMSP	1356	This course provides a detailed study of the knowledge and skills required to reach competence in performing patient assessment and airway management.	WECM	emergency, association





EMSP	1501	Preparation for certification as an Emergency Medical Technician (EMT).	WECM	emergency, association
EMSP	2143	A summative experience covering comprehensive, assessment-based patient care management for the paramedic level.	WECM	emergency, association
EMSP	2430	Knowledge and skills necessary to assess and manage ill or injured patients in diverse populations to include neonatology, pediatrics, geriatrics and other related topics.	WECM	emergency, association
EMSP	2434	This course provides a detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with medical emergencies.	WECM	emergency, association
EMSP	2544	Assessment and management of patients with cardiac emergencies. Includes single and multi-lead ECG interpretation.	WECM	emergency, association
EMSP	1164	An Emergency Medical Services (EMS) related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	emergency, enable
EMSP	2164	An Emergency Medical Services (EMS) related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	emergency, enable
EMSP	2165	An Emergency Medical Services (EMS) related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	emergency, enable





2265	An Emergency Medical Services (EMS) related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	emergency, enable
2266	An Emergency Medical Services (EMS) related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	emergency, enable
2160	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	emergency, enable, association
2305	Knowledge and skills to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents.	WECM	emergency, enable, association, local materials
1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	emergency, technology, events, association
1160	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
2161	A health-related work-based learning experience that enables the students to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
	2266 2160 2305 1391	learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 2266 An Emergency Medical Services (EMS) related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 2160 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 2305 Knowledge and skills to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents. 1391 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1160 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 2161 A health-related work-based learning experience that enables the students to apply specialized occupational theory, skills, and concepts. Direct supervision is provided	learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 2266 An Emergency Medical Services (EMS) related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 2160 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 2305 Knowledge and skills to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents. 1391 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1160 A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 2161 A health-related work-based learning experience that enables the students to apply specialized occupational theory, skills, and concepts. Direct supervision is provided





EMSP	2362	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
EMSP	2563	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
EMSP	2237	Instruction in a laboratory environment concentrating on practical medical skills and critical thinking abilities. Topics include a variety of skills appropriate to the student's training level. Required verifications of specific skills may be included.	WECM	environment, association
EMSP	2534	Knowledge and skills in the assessment and management of patients with medical emergencies, including medical overview, neurology, gastroenterology, immunology, pulmonology, urology, hematology, endocrinology, toxicology, and other related topics.	WECM	unintentional poisoning
ENGL	2328	A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. For repeatability purposes, students who take English 2326 should not also take English 2327 or 2328.	ACGM	civil society





ENGL	1301	Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis.	ACGM	effective, collaborative
ENGL	1302	Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions.	ACGM	effective, ethical
ENGL	2311	Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice individual and collaborative processes involved in the creation of ethical and efficient documents.	ACGM	ethical, collaborative
ENGL	2321	A survey of the development of British literature from the Anglo-Saxon period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. For repeatability purposes, students who take English 2321 should not also take English 2322 or 2323.	ACGM	traditional knowledge





ENGL	2331	A survey of world literature from the ancient world to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. For repeatability purposes, students who take English 2331 should not also take English 2332 or 2333.	ACGM	world
ENGL	2332	A survey of world literature from the ancient world through the sixteenth century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. For repeatability purposes, students who take English 2331 should not also take English 2332 or 2333.	ACGM	world
ENGL	2333	A survey of world literature from the seventeenth century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. For repeatability purposes, students who take English 2331 should not also take English 2332 or 2333.	ACGM	world
ENGL	1111	This course is an imaginative writing workshop. It may include fiction, non-fiction, poetry, or drama.	ACGM	
ENGL	2307	Practical experience in the techniques of imaginative writing. May include fiction, nonfiction, poetry, screenwriting, or drama.	ACGM	





ENGL	2322	A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. For repeatability purposes, students who take English 2321 should not also take English 2322 or 2323.	ACGM	
ENGL	2323	A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. For repeatability purposes, students who take English 2321 should not also take English 2322 or 2323.	ACGM	
ENGL	2326	A survey of American literature from the period of exploration and settlement to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. For repeatability purposes, students who take English 2326 should not also take English 2327 or 2328.	ACGM	





ENGL	2327	A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. For repeatability purposes, students who take English 2326 should not also take English 2327 or 2328.	ACGM	
ENGL	2342	The study of one or more literary genres including, but not limited to, poetry, fiction, drama, and film. Course descriptions are available each semester prior to registration.	ACGM	
ENGL	2343	The study of one or more literary genres including, but not limited to, poetry, fiction, drama, and film. Course descriptions are available each semester prior to registration.	ACGM	
ENGL	2351	A survey of Mexican-American/Chicano/a literature including fiction, non-fiction, poetry, and drama.	ACGM	
ENGR	2105	Laboratory experiments supporting theoretical principles presented in ENGR 2305 involving DC and AC circuit theory, network theorems, time, and frequency domain circuit analysis. Introduction to principles and operation of basic laboratory equipment; laboratory report preparation.	ACGM	domain





ENGR	2308	Methods used for determining the comparative financial desirability of engineering alternatives. Provides the student with the basic tools required to analyze engineering alternatives in terms of their worth and cost, an essential element of engineering practice. The student is introduced to the concept of the time value of money and the methodology of basic engineering economy techniques. The course will address some aspects of sustainability and will provide the student with the background to enable them to pass the Engineering Economy portion of the Fundamentals of Engineering exam.	ACGM	enable, sustainability
ENGR	2333	This course is the foundation for nearly all future chemical engineering courses and analysis. A strong foundation in mathematics, physics, and chemistry is required for application to the solution of problems in industrial chemistry. Students will receive an introduction to chemical engineering calculations, unit equations, process stoichiometry, material and energy balances, and states of matter, and will apply the laws of conservation of mass and energy to reacting and non-reacting, simple and complex chemical systems.	ACGM	future, conservation
ENGR	1307	Development of skills necessary to recognize and solve problems in surveying; introduction and use of various precision instruments used for surveying, including level, theodolites, electronic distance measuring equipment, and total stations for collecting field data; introduction of Global Positioning Systems (GPS) and Geographic Information Systems (GIS) and their use in surveying; and use of graphic design software, such as AutoCAD or Microstation, in surveying problems.	ACGM	Global





ENGR	1172	Electrical Engineering fundamentals laboratory that stresses laboratory procedures; learning use of common laboratory equipment such as power supplies, multimeters, signal generators, and oscilloscopes; making measurements; familiarization with simple DC resistor circuits; Ohm's law; analyzing AC signals, including frequency, period, amplitude, and rms value; inductors, capacitors and DC transients; measuring phase shift in an AC circuit due to an inductor or capacitor; and basics of laboratory report writing.	ACGM	
ENGR	1201	An introduction to the engineering profession with emphasis on technical communication and team-based engineering design. Includes instruction in the application of mathematical and scientific principles to the solution of practical problems for the benefit of society.	ACGM	
ENGR	1304	Introduction to computer-aided drafting using CAD software and sketching to generate two- and three-dimensional drawings based on the conventions of engineering graphical communication; topics include spatial relationships, multi-view projections and sectioning, dimensioning, graphical presentation of data and fundamentals of computer graphics.	ACGM	
ENGR	2106	Basic laboratory experiments supporting theoretical principles presented in ENGR 2306 involving design, construction, and analysis of combinational and sequential digital circuits and systems, including logic gates, adders, multiplexers, encoders, decoders, arithmetic logic units, latches, flip-flops, registers, and counters; preparation of laboratory reports.	ACGM	





ENGR	2110	Laboratory to accompany ENGR 2310. The purpose of this laboratory is to give students an intuitive understanding of digital circuits and systems. Laboratory exercises include construction of simple digital logic circuits using prototyping kits and board-level assembly of a personal computer.	ACGM	
ENGR	2300	Matrices, vectors, determinants, linear systems of equations, Gauss-Jordan elimination, vector spaces, basis, eigenvalues, eigenvectors, numerical methods in linear algebra using MATLAB, computer arithmetic, Gaussian elimination, LU factorization, iterative solutions to linear systems, iterative methods for estimating eigenvalues, singular value decomposition, QR factorization.	ACGM	
ENGR	2301	Basic theory of engineering mechanics, using calculus, involving the description of forces, moments, and couples acting on stationary engineering structures; equilibrium in two and three dimensions; free-body diagrams; friction; centroids; centers of gravity; and moments of inertia.	ACGM	
ENGR	2302	Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems.	ACGM	





2304	Programming principles and techniques for matrix and array operations, equation solving, and numeric simulations applied to engineering problems and visualization of engineering information; platforms include spreadsheets, symbolic algebra packages, engineering analysis software, and laboratory control software.	ACGM
2305	Principles of electrical circuits and systems. Basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources). Topology of electrical networks; Kirchhoff's laws; node and mesh analysis; DC circuit analysis; operational amplifiers; transient and sinusoidal steady-state analysis; AC circuit analysis; first-and second-order circuits; Bode plots; and use of computer simulation software to solve circuit problems.	ACGM
2306	Introduction to theory and design of digital logic, circuits, and systems. Number systems, operations and codes; logic gates; Boolean Algebra and logic simplification; Karnaugh maps; combinational logic; functions of combinational Logic; flip-flops and related devices; counters; shift registers; sequential logic; memory and storage.	ACGM
2310	Introduction to hardware structures and assembly-language concepts that form the basis of the design of modern computer systems. Internal data representation and arithmetic operations in a computer. Basic logic circuits. MIPS assembly language. Overview of PC architecture.	ACGM
	2305	array operations, equation solving, and numeric simulations applied to engineering problems and visualization of engineering information; platforms include spreadsheets, symbolic algebra packages, engineering analysis software, and laboratory control software. 2305 Principles of electrical circuits and systems. Basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources). Topology of electrical networks; Kirchhoff's laws; node and mesh analysis; DC circuit analysis; operational amplifiers; transient and sinusoidal steady-state analysis; AC circuit analysis; first-and second-order circuits; Bode plots; and use of computer simulation software to solve circuit problems. 2306 Introduction to theory and design of digital logic, circuits, and systems. Number systems, operations and codes; logic gates; Boolean Algebra and logic simplification; Karnaugh maps; combinational logic; functions of combinational Logic; flip-flops and related devices; counters; shift registers; sequential logic; memory and storage. 2310 Introduction to hardware structures and assembly-language concepts that form the basis of the design of modern computer systems. Internal data representation and arithmetic operations in a computer. Basic logic circuits. MIPS assembly language. Overview of PC





ENGR	2332	Stresses, deformations, stress-strain relationships, torsions, beams, shafts, columns, elastic deflections in beams, combined loading, and combined stresses.	ACGM	
ENGR	2334	Fundamental concepts of energy and thermodynamics (e.g., temperature, thermodynamic equilibrium, and heat) will be introduced; the course emphasizes techniques in the application of the fundamentals of thermodynamics to various processes as they frequently occur in chemical and bimolecular engineering. Provides the basic skills and tools necessary in designing and analyzing real-life engineering systems. Serves as preparation for other advanced courses in thermodynamics, energy conversion, heat transfer, etc.	ACGM	
ENGR	2405	Principles of electrical circuits and systems. Basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources) Topology of electrical networks; Kirchhoff's laws; node and mesh analysis; DC circuit analysis; operational amplifiers; transient and sinusoidal steady-state analysis; AC circuit analysis; first-and second-order circuits; Bode plots; and use of computer simulation software to solve circuit problems. Laboratory experiments supporting theoretical principles presented in ENGR 2305 involving DC and AC circuit theory, network theorems, time, and frequency domain circuit analysis. Introduction to principles and operation of basic laboratory equipment; laboratory report.	ACGM	





ENGT	1401	Fundamental concepts of electrical science including potential, current and power in DC circuits. Fundamental laws and relationships applied to the analysis of circuits and networks: capacitance, inductance and magnetism; and single-frequency concepts; use of calculators and computer software in design and analysis of circuits. Standard instrumentation used in test and measurement of DC circuits and systems will be introduced.	ACGM	
ENGT	1402	Complex AC circuit including transient analysis. Network theorems are applied to the solution of AC circuits. Resonance, filters, AC power and three-phase circuits are covered in detail. Continued application of calculators and computer design and analysis of circuits. Standard instrumentation used in testing AC circuits and systems and measurement of AC circuits and systems will be introduced.	ACGM	
ENGT	1407	Analysis, design, and simulation of combinational and sequential systems using: classical Boolean algebra techniques, laboratory hardware experiments and computer simulation. Introduction to programmable logic devices (PLDs) and application-specific integrated circuits using software tool to the design and analysis of digital logic circuits and systems. Standard instrumentation used in testing digital circuits and systems will be introduced.	ACGM	
ENTC	2381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	livelihood





ENTC	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ENTC	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ENTC	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ENTC	1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ENTC	1280	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ENTC	1323	Introduces the relationship between externally applied forces and internally induced stresses and the resulting deformations in structural members.	WECM	
ENTC	1343	Explanation of forces acting on structures to create equilibrium. Includes the concepts of friction, moments, couples, centroids, and moment of inertia.	WECM	





ENTC	1380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ENTC	1381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ENTC	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ENVR	1401	Interdisciplinary study of both natural (biology, chemistry, geology) and social (economics, politics, ethics) sciences as they apply to the environment. Focus on current global concerns, including, global warming, overpopulation, deforestation, pollution, biodiversity and resource use. Practical laboratory experience emphasizes the application of fundamental principles of biology, chemistry and geology as well as critical thinking and analysis.	ACGM	economic, environment, forest, biodiversity, global concerns, deforestation, disaster, pollution, reforestation





ENVR	1402	Interdisciplinary study of both natural (biology, chemistry, geology) and social (economics, politics, ethics) as they apply to the environment. Focus on energy issues, global warming, ozone loss, land use, conservation and management, deforestation, biodiversity, the history of environmental law and regulation and local environmental problems.	ACGM	economic, environment, loss, forest, biodiversity, conservation, deforestation
EPCT	1311	An overview of environmental science and current global concerns, and a brief history of environmental ethics, resource use, and conservation. Discussion of fundamental principles of resource economics and environmental health.	WECM	economic, environment, global, conservation
EPCT	1213	An introduction to the development of an emergency response contingency plan for a facility or community. Emphasis on analyzing the hazards, writing and implementing the contingency plans, and evaluating the effectiveness of the contingency plan.	WECM	effective, emergency
EPCT	1305	An introduction to the history of the environmental movement, including basic requirements for compliance with the environmental regulations.	WECM	environment
EPCT	1307	An historic overview of environmental safety and health. Emphasis is on the use of occupational safety and health codes.	WECM	environment
EPCT	1349	An in-depth study of the major federal and state environmental regulations.	WECM	environment
EPCT	2337	Research techniques required to perform site assessment. Emphasis on the American Society of Testing Materials (ASTM) and Comprehensive Environmental Response Compensation Liability Act (CERCLA) Super Fund Standards.	WECM	environment, labor standards, local materials





EPCT	1243	A study of the skills required in treatment, remediation, and disposal processes of solid waste, hazardous materials, and hazardous waste. Emphasizes the technologies applicable in the field.	WECM	hazardous waste, local materials, radioactive, residual waste
EPCT	2335	Regulations and standards in the analysis of samples using specific analytical instruments and their procedures. Emphasis on instrument calibrator sample preparation, evaluation, and reporting of analytical results.	WECM	labor standards
EPCT	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	livelihood
EPCT	1350	The application of math skills and chemical knowledge in solving environmental technology problems.	WECM	technology, environment
EPCT	1344	Sampling protocol, procedures, quality control, preservation technology, and field analysis. Emphasis on analysis commonly performed by the field technician.	WECM	technology, preservation
EPCT	1247	Exploration of the options available for source reduction, waste minimization, and pollution prevention including regulatory standards applicable to these activities.	WECM	waste, pollution , radioactive, untreated wastewater
EPCT	1327	Study of conventional water treatment plants including administration and management. Emphasis on the operation of motors, pumps, and disinfection in small water plants.	WECM	Water, coastal eutrophication, drinking water





EPCT	1341	Basic concepts in threshold limits, dose response, and general recognition of occupational hazards, including sampling statistics, calibration, and equipment use. A study of the control of occupational hazards and sample collection and evaluation methods.	WECM	
ESOL	33	This course develops public/academic oral language skills through active participation in group projects and presentations. Rhetorical skills such as narration, description, and process will be practiced. Students build on note-taking skills and comprehension based on academic lectures. Pronunciation skills, including stress and intonation, will be refined with focused effort on areas of need through monitoring of oral production.	ACGM	active participation, direct participation, meaningful participation
ESOL	31	This course focuses on developing basic social and preacademic listening and speaking skills. It includes skills such as understanding and giving descriptions, directions, and explanations, and listening for main ideas. Conversation conventions are practiced as well as non-verbal communication skills. Pronunciation and listening for discrimination are introduced through the study of basic phonetic segments and intonation patterns.	ACGM	discrimination, mutual understanding
ESOL	46	This course provides instruction in special topics related to reading. The content may include reviewing reading comprehension, vocabulary development, and critical thinking skills as well as learning to value cultural differences. This course is open only to students whose first language is not English.	ACGM	disparities





ESOL	34	This course stresses academic speaking skills. Students learn formal presentation techniques as they defend a point of view and participate in seminars, panels, and debates. Formal rhetorical skills such as cause/effect, process, and persuasion will be practiced. In addition, students refine note-taking skills and practice critical assessment of arguments and presentation skills. Pronunciation skills, including stress and intonation, will continue to be refined with focused effort on areas of need through monitoring of oral production.	ACGM	dissent
ESOL	44	The capstone reading course prepares students to transition into college-level courses. Skills and strategies from previous courses are expanded to include evaluating the strength of an argument, identifying bias, and analyzing the strength and relevance of supporting details and assessing the author's credibility. Students paraphrase and summarize academic texts as well as explore figurative language and literary devices.	ACGM	dissent
ESOL	54	This course involves a review of essay structure with emphasis on development and organization of informative and persuasive/argumentative essays. It introduces paraphrasing, summarizing, and synthesis of information along with library and internet research skills for essay writing.	ACGM	dissent
ESOL	64	These courses are designed to complement the ESOL 0051- 0054 writing series. They provide instruction and practice with discrete grammar points necessary for effective writing.	ACGM	effective





ESOL	64	This final grammar course first reviews the elements of English grammar introduced in ESOL0061, ESOL0062, and ESOL0063 and then encourages application of this knowledge through editing activities. Attention is given to diagnosing fragments, run-ons, comma splices, and parallelism errors. Finally, emphasis is placed upon mastery of all the grammatical structures and marking conventions needed for effective writing of sentences, paragraphs, and essays.	ACGM	effective
ESOL	34	These courses prepare students to communicate orally in both public and academic environments. Emphasis is placed on developing language functions, pronunciation, and listening skills, and improving social and intercultural communication skills. Activities range from one-on-one conversation and brief descriptions to formal oral presentations and debates.	ACGM	environment, public
ESOL	61	This first grammar course covers count/noncount nouns, pronouns, adjectives, adverbs, basic sentence patterns, as well as the following verb tenses - simple present and past, present and past progressive, and future. These basic elements of English grammar are necessary for writing correct sentences and paragraphs.	ACGM	future





ESOL	63	This third grammar course reviews elements of English grammar introduced in ESOL0062 and introduces the following grammatical points: past perfect, future perfect, and perfect progressive tenses; simple, compound, and complex sentences as well as appropriate sentence connectors and punctuation for these sentences; active and passive voice; expansion of modals, gerunds, and infinitives. These grammar points are necessary for writing sentences, paragraphs, and essays.	ACGM	future
ESOL	51	This course focuses on students writing a series of sentences correctly in an informal paragraph. It covers mastery of standard sentence structure, an introduction to end-of-sentence punctuation, and exposure to basic vocabulary.	ACGM	informal
ESOL	42	This course builds upon the skills introduced in ESOL 0041. Students identify various modes of paragraph organization. Students distinguish between facts and opinions; make inferences; and increase reading rates and fluency. Students practice strategies such as context clues and word parts to deal with unknown words and acquire new vocabulary.	ACGM	opinion
ESOL	32	This course develops intermediate social and pre-academic listening and speaking skills through situational activities. Students will express ideas and opinions in small groups and learn to understand and react appropriately. This course introduces note-taking skills and comprehension of academically oriented materials. Pronunciation and listening discrimination skills are built upon and refined.	ACGM	Opinion, discrimination, local materials





ESOL	34	Estos cursos preparan al alumno para comunicarse con confianza en situaciones sociales y academicas. Se desarollan las varias funciones del lenguaje, se mejora la pronunciacion y comprension auditiva y se practica la comunicacion academica y transcultural. Las actividades didacticas incluyen describir lugares y objetos, proyectos en grupo, presentaciones orales y debates formales.	ACGM
ESOL	36	This course provides instruction in special topics related to oral and aural skills. The content may include reviewing social and academic listening/speaking skills, pronunciation of Standard American English, presentation techniques, and improving interpersonal/cross-cultural communication. This course is open only to students whose first language in not English.	ACGM
ESOL	41	This course focuses on basic reading comprehension. Students practice identifying main ideas and supporting details and employ reading strategies such as pre-reading, skimming, and scanning. Students build vocabulary and learn to use a dictionary.	ACGM
ESOL	44	These courses engage students in reading material from daily experience and prepare them for college reading tasks. Each course instructs students in reading skills, vocabulary development, critical thinking skills, and the use of resources.	ACGM
ESOL	44	Estos cursos permiten a los estudiantes el acceso a material de lectura de la vida diaria y los prepara para tareas de lectura academica. Cada curso instruye a los estudiantes en habilidades de lectura, desarrollo de vocabulario, pensar en forma critica	ACGM





ESOL	43	This course builds upon the skills introduced in ESOL 0042, emphasizing critical thinking skills including identifying author's purpose, tone and point of view; predicting outcomes; and drawing conclusions. Students identify and paraphrase stated and implied main ideas.	ACGM	
ESOL	54	Estos cursos estan diseñados con el objeto de ayudar los alumnos a obtener fluidez y confianza en escritura. Los cursos se enfocan en el proceso de escritura. A traves de crear, planear y revisar, los estudiantes produciran escritos para diferentes audiencias y con diversos propositos.	ACGM	
ESOL	54	These courses are designed to help students increase fluency and build confidence in writing. The courses focus on writing as a process. Through inventing, drafting, and revising, students write for specific audiences and purposes.	ACGM	
ESOL	52	This course introduces the elements of formal paragraph structure as well as writing as a process - inventing, drafting, revising, and editing. It emphasizes a variety of modes such as narration, description, definition, and explanation.	ACGM	
ESOL	53	This course reviews the elements of paragraph structure and introduces the essay through writing as a process. It emphasizes the development and organization of informative essays such as classification, cause/effect, and comparison/contrast.	ACGM	





ESOL	56	This course provides instruction in special topics related to writing. The content may include reviewing single and multi-paragraph compositions, sentence structure, and edited American usage as well as developing awareness of organizational conventions of written American English. This course is open only to students whose first language is not English.	ACGM	
ESOL	64	Estos cursos estan disenados para complementar la serie de Escritura 0051-0054. Dichos cursos proveen instruccion y ejercicios practicos, asi como puntos esenciales de gramatica necesarios para la efectiva comunicacion escrita.	ACGM	
ESOL	62	This second grammar course reviews elements of English grammar introduced in ESOL 0061 and introduces the following grammar and mechanics points: capitalization and basic end punctuation, count/noncount nouns and articles, prepositions, present perfect and present perfect progressive verb tenses, modals, gerunds and infinitives, and adjective clauses. These grammar points are necessary for writing correct sentences and paragraphs.	ACGM	
ESOL	66	This course provides instruction in special topics related to grammar. Content may include reviewing parts of speech, verb forms, word order, and other elements of American English grammar. It may also emphasize the application of grammar in written and oral production. This course is open only to students whose first language is not English.	ACGM	





ETWR	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.	WECM	technology, events
FDNS	1309	A study of the nutritional status of populations at the national, state, and local community levels. Socioeconomic cultural, and psychological influences on eating behavior, national and state health objectives, marketing strategies for objective implementation and community nutrition programs serving risk-group populations. Basic teaching/counseling methods for the nutrition education of small groups and individual clients/patients.	WECM	economic, health
FDNS	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
FIRS	1301	One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. NOTE: THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION (TCFP).	WECM	Institutions, legitimate institution





FIRS	1407	One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. NOTE: THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION.	WECM	Institutions, legitimate institution
FIRT	1315	The chemical characteristics and behavior of various materials. Storage, transportation, handling hazardous emergency situations, and the most effective methods of hazard mitigation.	WECM	effective, emergency, local materials, mitigation
FIRT	2309	Analysis of the nature of fire problems and selection of initial strategies and tactics including an in-depth study of efficient and effective use of manpower and equipment to mitigate the emergency.	WECM	effective, emergency, resiliency
FIRT	2319	Analysis of the nature of fire problems and selection of initial strategies and tactics including an in-depth study of efficient and effective use of manpower and equipment to mitigate the emergency.	WECM	effective, emergency, resiliency
FIRT	1319	Firefighter occupational safety and health in emergency and non-emergency situations.	WECM	emergency
FIRT	2305	Preparation of fire and emergency services personnel to deliver instruction from a prepared lesson plan. Includes the use of instructional aids and evaluation instruments to meet the Texas Commission on Fire Protection requirements for Fire Instructor I certification.	WECM	emergency





FIRT	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	livelihood
FIRT	1301	Orientation to the fire service, career opportunities, related fields.	WECM	opportunities, livelihood
FIRT	1353	Study of the rights, duties, liability concerns, and responsibilities of public fire protection agencies while performing assigned duties.	WECM	rights, basic rights, public
FIRT	1311	The use of water in fire protection. Application of hydraulic principles to analyze and solve water supply problems.	WECM	Water
FIRT	1338	Design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers.	WECM	Water
FIRT	1303	Basic fire and arson investigation practices. Emphasis on fire behavior principles related to fire cause and origin determination.	WECM	
FIRT	1307	Local building and fire prevention codes. Fire prevention inspections, practices, and procedures.	WECM	
FIRT	1309	Introduction to the organization and management of a fire department and the relationship of government agencies to the fire services. Emphasis is on fire service leadership from the perspective of the company officer.	WECM	
FIRT	1327	Components of building construction that relate to life safety. Includes relationship of construction elements and building design impacting fire spread in structures.	WECM	





FIRT	1333	Chemical nature and properties of inorganic compounds as related to the fire service. Fundamental laws of chemistry, states of matter, gas laws, chemical bonding, and thermodynamics.	WECM	
FIRT	1349	In-depth study of fire service management as pertaining to budgetary requirements, administration, organization of divisions within the fire service, and relationships between the fire service and outside agencies.	WECM	
FIRT	2333	Fire Investigation techniques and defense of findings in a court room setting.	WECM	
FLMC	1311	Overview of film history, aesthetics, technology and techniques including introduction to cinematic elements and approaches to analysis and criticism. Identify dramatic elements of films, visual and sound elements of film, motion picture genres, and basic plot structures; and identify important individuals in the history of film and motion picture technology.	WECM	technology
FLMC	1331	A course in the applications of computers for video production. Design of computer graphic workstations and development of a rationale for selecting software, hardware, and peripherals.	WECM	
FLMC	2331	Designing vector and raster graphics, executing rendering techniques, designing and producing three-dimensional (3-D) materials, and selecting hardware, software, and peripherals for video production.	WECM	
FREN	1300	Basic practice in comprehension and production of the spoken language. Emphasis on oral communication with an introduction of basic grammatical concepts and the development of reading and vocabulary skills. Cultural topics will be discussed.	ACGM	





FREN	1411	This is the first semester of academic transfer French. This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented.	ACGM	
FREN	1412	This is the second semester of academic transfer French. This course continues the oral practice, reading, writing, grammar and cultural studies begun in FREN 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax.	ACGM	
FREN	2311	This is the third semester of academic transfer French. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded.	ACGM	
FREN	2312	This is the fourth semester of academic transfer French. This course is a continuation of FREN 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture.	ACGM	
FSHD	1308	A study of the effects of eastern and western cultures on the development of fashion. Examination of the impact of social, psychological, economic, demographic, and lifestyle trends on fashion trends.	WECM	economic





FSHD	2288	A work-based learning experience that enable the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.	WECM	enable
FSHD	2388	A work-based learning experience that enable the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.	WECM	enable
FSHD	1322	Fundamentals of quick sketching to communicate design ideas. Instruction in drawing the male and female fashion figure. Emphasis on simple methods for making quick sketches to illustrate style information. This course must be completed with a grade of 'C' or better.	WECM	fundamental
FSHD	2305	Fundamentals of computerized pattern design and marker making, as they pertain to the industrial production of apparel products. This course must be completed with a grade of 'C' or better.	WECM	fundamental
FSHD	1324	Fundamentals of mass production of apparel focusing on the operation of industrial sewing and pressing equipment. Survey of materials selection and construction techniques used at all price levels of mass produced apparel. Introduction to industry seam allowances. Identification of differences between ready-to-wear and couture construction. This course must be completed with a grade of 'C' or better.	WECM	fundamental, local materials





FSHD	1233	A course which combines the study of fashion with travel. Exploration of fashion, art, architecture, textiles, costumer, business, and cultural activities in major art and fashion cities. Examination of the most current work in the industry from a global perspective. This course may be repeated if topics and learning outcomes vary.	WECM	Global
FSHD	1302	Survey of the world of fashion businesses. Introduction to the creation and merchandising of fashion through the study of fashion vocabulary, the fashion process, fashion publications, and career opportunities.	WECM	opportunities, world, livelihood
FSHD	1311	Survey of the evolution of fashion change, traced through garment development from ancient times to present day. A study of customs and silhouettes of each historical period and their modern day adaptations.	WECM	
FSHD	1332	Skill development in taking body measurements. Instruction in developing custom fittings for customized patterns. In-depth coverage of the process of transferring a custom body fitted canvas to a basic dress form and padding it for custom sizing.	WECM	
FSHD	1391	The principles of good design for mass produced apparel are studied, especially as they apply to structural and decorative design. Careful attention is given to fabric selection and design. This course must be completed with a grade of 'C' or better.	WECM	
FSHD	2241	Instruction in sizing standard patterns larger and smaller for the mass production of apparel. A study of 1", 1-1/2", and 2" and S-M-L-XL grade rules and their applications. Skill development in grading basic and fashion patterns with the ruler, the grading machine, and the computer. This course must be completed with a grade of 'C' or better.	WECM	





FSHD	2312	A study of garment design for the theater in which costumes are researched and designed for theatrical productions. Instruction in the effect of lighting and staging in relationship to costuming.	WECM	
FSHD	2343	Advanced concepts in designing a collection of marketable apparel. Instruction in developing a design work board for specific target market and selecting the most marketable ideas for the collection. Emphasis on resource development, fabric selection, estimating wholesale costs, and initial pattern and garment production. This course must be completed with a grade of 'C' or better.	WECM	
FSHD	2344	A continuation of the Fashion Collection Design course (FSHD 2343). Emphasis on production, costing, and marketing a cohesive collection of fashion apparel. Instruction in completing production patterns for all collection garments. This course must be completed with a grade of 'C' or better.	WECM	
FSHN	2110	Preparation of portfolio to meet professional standards. Includes development of presentation skills and improvement of job-seeking techniques for fashion-industry employment.	WECM	employment, decent work, labor standards
FSHN	1312	An overview of fashion trends and concepts to include, branding, environmental influences, and marketing operating.	WECM	environment
FSHN	1325	An introduction to tailoring women's apparel including instruction in pattern alterations and fit. Fundamentals of sewing machine operations, fabric preparation and cutting, machine and hand sewing techniques, and pressing proficiencies.	WECM	fundamental





FSHN	2303	Fundamentals of fashion buying with instruction in planning, pricing, and purchasing retail fashion inventories. Identification of wholesale merchandise resources. Instruction in calculating retail math functions of buying.	WECM	planning, fundamental
FSHN	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
FSHN	1123	An introduction to mass production, marketing, and merchandising in the fashion industry. This course must be completed with a grade of 'C' or better.	WECM	
FSHN	1301	A general study of textiles with emphasis on factors that affect the hand, appearance, and performance in clothing use. Examination of the fibers, yarns, dyeing, printing and finishing. Application of textiles used in the apparel industry.	WECM	
FSHN	1313	Principles of color theory including the effect of light on color and mixing color pigment in opaque media. This course must be completed with a grade of 'C' or better.	WECM	
FSHN	1315	Instruction in draping various designs on a dress form and translating the designs to a muslin pattern.	WECM	
FSHN	1382	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
FSHN	1417	Principles of drafting basic collars, skirts, bodices, and sleeves. Includes cutting out garments.	WECM	





FSHN	1418	A continuation of Pattern Drafting I. Emphasis on drafting basic patterns and garment construction.	WECM
FSHN	2301	A study of fashion direction, publicity, and fashion event coordination. Emphasis on fashion event production.	WECM
FSHN	2307	General principles and practices of fashion advertising and consumer directed communication including a study of integrated marketing communications.	WECM
FSHN	2315	Develops techniques for drafting patterns for apparel. Includes creation and construction of original designs.	WECM
FSHN	2320	Skill development in the creation of showroom or retail store window/interior displays that sell merchandise.	WECM
FSHN	2370	Advanced pattern making for production ready patterns. Creation of "tech packs" (technical packets) with detailed production specifications of fabric and trims, sewing construction, finishing details, size specifications, grading, and allowable tolerances. Creation of the PLM - Product Life Management cycle.	WECM
FSHN	2372	This course covers Adobe Photoshop® and Illustrator® as it applies to fashion marketing & design boards, line sheets, tech packs, and other forms of product promotion. The student will be able to create "flats" (garment illustrations) and learn how to manipulate textiles through Photoshop® to recolor, resize, innovate, and apply the texture/ print to garments.	WECM
FSHN	2382	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM
FSHN	2432	Advanced techniques for drafting patterns.	WECM





GAME	1371	Introduction to Motion Capture with an emphasis on how it translates into Video Games. Covers principles of Rigging, Animating, Motion Cleaning, and Editing and how to import and use the animation data on characters in the latest video game engines.	WECM	Clean
GAME	2387	A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.	WECM	enable
GAME	2487	A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.	WECM	enable
GAME	1309	Mathematical elements and algorithms involved in basic animation. Includes generating graphics, viewing 3-D environments such as visible line detection and 3-D surfaces, image processing techniques, and special effects.	WECM	environment
GAME	1409	Mathematical elements and algorithms involved in basic animation. Includes generating graphics, viewing 3-D environments such as visible line detection and 3-D surfaces, image processing techniques, and special effects.	WECM	environment
GAME	1370	Introduction to Concept Art for Video Games with emphasis on characters, environments, and other fundamentals of Video Game production.	WECM	environment, fundamental





GAME	1301	A study of ethical issues that apply to computer related professions, intellectual property and privacy issues, professional responsibility, and the effects of globalization. Emphasizes the practical application of computer ethics through case studies and current events in the game and simulation industry.	WECM	ethical, events, responsibility, responsible
GAME	2325	Skinning and weighting, forward kinematics, inverse kinetics, constraints, expressions, scripting and driven keys, mesh deformers, morph targets/blend shapes, and animation user interfaces.	WECM	expression, expression
GAME	1372	Introduction to fundamental principles of Visual Effects for video games. Topics include how to make particle, sprite, smoke, fire, and other VFX (Visual Effects).	WECM	fundamental
GAME	1373	Introduction to the fundamentals of the Objective-C language with emphasis on how to create apps for iOS devices.	WECM	fundamental
GAME	1394	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
GAME	1494	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
GAME	2342	Skill development in C++ programming for games and simulations. Examines real-world C++ development issues.	WECM	world
GAME	1212	Game and simulation design. Application of design theories to production-based projects from the conceptual stage to a completed project.	WECM	





1302	In-depth coverage of storyboarding for the development of games and simulations. Addresses pre-production preparation and creation of comprehensive design for a game or simulation including target audience analysis, purpose, goals and objectives, content outline, flow chart, and storyboard.	WECM
1303	Introduction to electronic game development and game development careers. Includes examination of history and philosophy of games, the game production process, employee factors for success in the field, and current issues and practices in the game development industry.	WECM
1304	Introduction to the tools and concepts used to create levels for games and simulations. Incorporates level design, architecture theory, concepts of critical path and flow, balancing, play testing, and storytelling. Includes utilization of toolsets from industry titles.	WECM
1306	Introduction to game and simulation development. Includes analysis of existing applications and creation of a game using an existing game engine. In-depth coverage of the essential elements of game design. Also covers an overview of cultural history of electronic games, survey of the major innovators, and examination of the trends and taboos that motivate game design.	WECM
1336	Architectural spaces and modeling in a real-time game editor. Includes techniques for building, texturing, and lighting a game level to function in real-time.	WECM
1343	Game and simulation programming. Includes advanced pointer manipulation techniques and pointer applications, points and vectors, sound, and graphics.	WECM
	1303 1304 1306	games and simulations. Addresses pre-production preparation and creation of comprehensive design for a game or simulation including target audience analysis, purpose, goals and objectives, content outline, flow chart, and storyboard. 1303 Introduction to electronic game development and game development careers. Includes examination of history and philosophy of games, the game production process, employee factors for success in the field, and current issues and practices in the game development industry. 1304 Introduction to the tools and concepts used to create levels for games and simulations. Incorporates level design, architecture theory, concepts of critical path and flow, balancing, play testing, and storytelling. Includes utilization of toolsets from industry titles. 1306 Introduction to game and simulation development. Includes analysis of existing applications and creation of a game using an existing game engine. In-depth coverage of the essential elements of game design. Also covers an overview of cultural history of electronic games, survey of the major innovators, and examination of the trends and taboos that motivate game design. 1336 Architectural spaces and modeling in a real-time game editor. Includes techniques for building, texturing, and lighting a game level to function in real-time. Game and simulation programming. Includes advanced pointer manipulation techniques and pointer applications,





GAME	1349	Computer graphics with focus on the basic principles and techniques of graphics applications. Emphasizes 3-D computer graphics and translating a task from design to suitable algorithms and program code. Combines principles and major techniques in computer graphics with third-party game and simulation technologies.	
GAME	1353	Network topologies, architecture, and communication in game and simulation programming. Introduces sockets programming utilizing TCP and UDP protocols in a high-level language. Focuses on blocking and asynchronous modes.	WECM
GAME	1359	Design and development of game and simulation programs including user interface design, mathematical elements, image and file structure, and software development techniques.	WECM
GAME	1403	Introduction to electronic game development and game development careers. Includes examination of history and philosophy of games, the game production process, employee factors for success in the field, and current issues and practices in the game development industry.	WECM
GAME	1404	Introduction to the tools and concepts used to create levels for games and simulations. Incorporates level design, architecture theory, concepts of critical path and flow, balancing, play testing, and storytelling. Includes utilization of toolsets from industry titles.	WECM





GAME	1406	Introduction to game and simulation development. Includes analysis of existing applications and creation of a game using an existing game engine. In-depth coverage of the essential elements of game design. Also covers an overview of cultural history of electronic games, survey of the major innovators, and examination of the trends and taboos that motivate game design.	WECM
GAME	1436	Architectural spaces and modeling in a real-time game editor. Includes techniques for building, texturing, and lighting a game level to function in real-time.	WECM
GAME	1443	Game and simulation programming. Includes advanced pointer manipulation techniques and pointer applications, points and vectors, sound, and graphics.	WECM
GAME	1459	Design and development of 2-D game and simulation programs including user interface design, mathematical elements, image and file structure, and software development techniques. Introduces the basics of 3-D graphics related to game and simulation programming.	WECM
GAME	2302	Presents applications of mathematics and science in game and simulation programming. Includes the utilization of matrix and vector operations, kinematics, and Newtonian principles in games and simulations. Also covers code optimization.	WECM
GAME	2303	Basic techniques in artificial intelligence related to game and simulation programming. Includes knowledge representation and interference techniques, expert systems, path finding algorithms, and search techniques for problem solving.	WECM





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GAME	2304	Intermediate approach to the tools and concepts used to develop levels of games and simulations. Incorporates an intermediate exploration of level design, architecture theory, concepts of critical path and flow, balancing, play testing and storytelling. Includes utilization of toolsets from industry titles.	WECM	
GAME	2308	Design and management of an industry standard portfolio. Includes techniques in self-promotion, resume writing, portfolio distribution systems, and interviewing.	WECM	
GAME	2332	Skill development in an original modification based on a current game engine. Includes management of version control; development of project timeliness; integration of sound, models, and animation; production of demos; and creation of original levels, characters, and content for a real-time multiplayer game.	WECM	
GAME	2333	Advanced applications of game and simulation programming techniques. Includes advanced rendering techniques and BSDP trees. Incorporates shadowing, lighting, collision detection, and 3-D animation and motion.	WECM	
GAME	2334	Continuation of an original modification based on a current game engine with an emphasis on new content and significant changes in game play over the base game experience. Includes creation of original levels, characters, and content for a real-time multiplayer game applying skills learned in previous classes.	WECM	
GAME	2336	Lighting, shading, and texture painting for 3-D models using digital painting techniques. Emphasizes lighting, shading, and texture creation of limited resolution to increase system performance for digital games and simulation training models.	WECM	





2338	Testing and debugging gaming and simulation applications in the alpha and beta stages of production. Includes critiques of the product and written documentation of the testing and debugging processes.	WECM
2341	Scripting languages with emphasis on game concepts and simulations.	WECM
2347	Optimization of student-created games. Includes performance tuning, debugging, designing for test, software architecture design, object-oriented practices for game play, asset management, and coding best practices.	WECM
2353	Vector tools for graphics, transformation of objects, modeling shapes with polygon meshes, 3-D viewing, rendering faces for realism, and color theory for game and simulation programming.	WECM
2359	Creation of a game and/or simulation project utilizing a team approach. Includes animation, titles, visualization of research results, modeling with polygon frames, curves and surfaces, 3-D text and animation with keyframes, paths (objects and curves), morphing, vertex keys, skeletons, and lattices.	WECM
370	A continuation of Concept Art I for video games with emphasis on intermediate techniques in Photoshop and completing a concept art piece for the student's portfolio.	WECM
2372	Advanced principles of Visual Effects for video games. Covers creating and integrating Visual Effects for the preparation of a Demo Reel.	WECM
	2341 2347 2353 2359	in the alpha and beta stages of production. Includes critiques of the product and written documentation of the testing and debugging processes. 2341 Scripting languages with emphasis on game concepts and simulations. 2347 Optimization of student-created games. Includes performance tuning, debugging, designing for test, software architecture design, object-oriented practices for game play, asset management, and coding best practices. 2353 Vector tools for graphics, transformation of objects, modeling shapes with polygon meshes, 3-D viewing, rendering faces for realism, and color theory for game and simulation programming. 2359 Creation of a game and/or simulation project utilizing a team approach. Includes animation, titles, visualization of research results, modeling with polygon frames, curves and surfaces, 3-D text and animation with keyframes, paths (objects and curves), morphing, vertex keys, skeletons, and lattices. 370 A continuation of Concept Art I for video games with emphasis on intermediate techniques in Photoshop and completing a concept art piece for the student's portfolio. 2372 Advanced principles of Visual Effects for video games. Covers creating and integrating Visual Effects for the





GAME	2402	Presents applications of mathematics and science in game and simulation programming. Includes the utilization of matrix and vector operations, kinematics, and Newtonian principles in games and simulations. Also covers code optimization.	WECM	
GAME	2433	Advanced applications of game and simulation programming techniques. Includes advanced rendering techniques and BSDP trees. Incorporates shadowing, lighting, collision detection, and 3-D animation and motion.	WECM	
GAME	2459	Creation of a game and/or simulation project utilizing a team approach. Includes animation, titles, visualization of research results, modeling with polygon frames, curves and surfaces, 3-D text and animation with keyframes, paths (objects and curves), morphing, vertex keys, skeletons, and lattices.	WECM	
GEOG	1301	The physical composition of the earth is surveyed. Topics include weather, climate, topography, plant and animal life, land, and the sea. Emphasis is on the earth in space, use of maps and charts, and place geography.	ACGM	Earth, weather, climate change, climate-related, contaminated soil
GEOG	1303	A study of major developing and developed regions with emphasis on awareness of prevailing world conditions and developments, including emerging conditions and trends, and awareness of diversity of ideas and practices to be found in those regions. Course content may include one or more regions.	ACGM	world
GEOG	1302	This course focuses on the development of regional variations of culture. Topics include the distribution of races, religions, and languages. Aspects of material culture are also included. Emphasis is on origins and diffusion.	ACGM	





GEOL	1403	This course is for science and non-science majors. It is an integrated study of earth materials and processes and interactions between solid earth, oceans, atmosphere, and biosphere. Included is an introduction to plate tectonic theory, geochemistry, geophysics, hydrology, geomorphology, and the earth's setting in space.	ACGM	Earth, biosphere, rising sea level
GEOL	1405	This course covers the earth as a habitat with special attention to the interrelationships between humans and the physical environment. Topics covered include: geologic factors in land use planning, hydrology, geologic hazards, waste disposal and pollution, conservation of earth's natural resources, climate, energy and geologic resource development, population dynamics, and related current issues in environmental geosciences.	ACGM	earth, environment, planning, waste, clean energy, climate change, climate-related, land c, loss of species, consumption, red list, threatened species
GEOL	1404	This course is for non-science and science majors. It is a study of earth materials and processes within a developmental time perspective. Topics include: fossil taxonomy and preservation, stratigraphy, geologic time scale, relative and absolute age dating, geologic maps, plate tectonics, astronomy, events during each major interval of the geologic time scale, glaciation, evolution and energy. The geologic history of North America is emphasized.	ACGM	earth, events, fossil
GEOL	1402	This course continues the study of the interaction of the earth sciences and the physical world. Special topics and fieldwork from the disciplines of geology, astronomy, meteorology, oceanography and related sciences may be covered. Selected principles and concepts from these applied sciences are explored. This course may be conducted as a field course.	ACGM	earth, world, rising sea level





GEOL	1401	This course is for the non-science major. It is an introductory survey of physical geology, historical geology, oceanography, meteorology, and astronomy. It relates the interaction of the earth sciences to the physical world.	ACGM	Earth, world, oceanography, rising sea level, contaminated soil
GEOL	1445	This is an introductory study of the geological, chemical, physical and biological characteristics and processes of earth's oceans. Topics include the formation of ocean basins and geologic materials, composition of seawater, currents, waves and tides, oceanic interaction with the atmosphere, marine pollution, marine resources, and life in the ocean.	ACGM	Water, earth, coastal eutrophication, depletion of resources, ocean life, marine debris, marine life, rising sea level
GEOL	1447	This course will survey weather phenomena, climate, and the processes that control them. Topics covered include composition and structure of the atmosphere, interaction of the ocean and atmosphere, climate, hazards of severe weather, and methods of forecasting weather.	ACGM	weather, climate change, climate-related
GERM	1411	This is the first semester of academic transfer German. This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented.	ACGM	
GERM	1412	This is the second semester of academic transfer German. This course continues the oral practice, reading, writing, grammar and cultural studies begun in GERM 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax.	ACGM	





GERM	2311	This is the third semester of academic transfer German. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded.	ACGM	
GERM	2312	This is the fourth semester of academic transfer German. This course is a continuation of GERM 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture.	ACGM	
GERS	2333	Exploration of the legal and ethical issues that families must consider as family members age. Emphasis on advocacy for the elderly in providing legal and financial well-being as well as knowledge regarding the access of social and medical programs for the elderly.	WECM	Access, ethical, family, well-being
GERS	1301	Overview of the social, psychological, and biological changes that accompany aging and an overview of the implications of these changes for the individual, as well as for the larger society. The student will compare and contrast the different views of aging presented by the disciplines of biology, sociology, and psychology; demonstrate an understanding of the demographic changes due to aging experiences in the United States. The student will articulate the impact of an aging population on key social institutions such as the family, the economy, the political system, and the health care industry; effectively rebut key misconceptions regarding aging and the elderly; and identify potential career choices in gerontology.	WECM	effective, Institutions, family, aging population, legitimate institution , mutual understanding, quality education





GERS	1307	Activity directing in long-term health care facilities. Includes assessment, care planning, documentation process, and evaluation of client needs. Also addresses program design and resources/funding. This course, when combined with 'Long Term Care Activity Directing' and 'Practicum-Gerontology' meets the State requirements to be qualified as an activity director in Texas.	WECM	planning, basic needs, depletion of resources
GERS	1342	Introduction and analysis of current knowledge and concerns related to psychological aging. Includes the theoretical and empirical foundations relevant to the psychological study of the later part of the life span. The course is taught from an interdisciplinary perspective and focuses on topics related to perceptual, cognitive, personality, and interpersonal social development. Examination of issues related to psychological adjustment and death and dying.	WECM	quality of life
GERS	1343	Scientific study of a lifelong process of development with specific focus on the physical, cognitive, and psychosocial aspects of adult development and aging.	WECM	quality of life
GERS	1392	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Learning outcomes/objectives are determined by local occupational need and business and industry trends.	WECM	technology, events





GERS	1304	Role of the activity director in long-term health care facilities. Includes study of history, regulations, communications, advocacy, ethics, service delivery, and volunteer management. This course, when combined with Long Term Care Activity Directing II and Practicum-Gerontology meets the State requirements to be qualified as an activity director in Texas.	WECM	unpaid work
GERS	1310	Gerontological social work practice. Emphasizes principles of practice, application of research, and the formulation of policies as they relate to older adults. Includes the role of the social worker from a gerontological perspective. Introduces the student to special populations which are most vulnerable: aging women, aging people of color, the disabled, and aging homosexuals.	WECM	vulnerable
GERS	2166	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
GERS	2366	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
GISC	2401	Study of the management of geographic information, system life cycles, and costs and benefits. Topics include demographic management and institutional issues such as data providers, data management, combination of attribute and graphical data, information storage and access, Texas and national standards for spatial data; and applications of GIS for demographic modeling and analysis.	WECM	Access, Institutions, quality of life





GISC	1401	Introduction to the principles of cartography and geography. Emphasis on global reference systems and the use of satellites for measurements and navigation.	WECM	Global
GISC	2311	Application of GIS technology to real workplace applications from public and private sectors. Completion of Global Positioning Systems (GPS) fieldwork required for lab exercises.	WECM	technology
GISC	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
GISC	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
GISC	1125	Introduction to basic Geographic Information Systems (GIS) operations, including file management and data transfer. Students will also learn about the ways in which GIS is used in different fields including business, government, and scientific analysis. Presentations will be made about career possibilities by GIS professionals.	WECM	
GISC	1145	Designed to introduce Geographic Information Systems (GIS) data manipulation procedures as related to engineering applications. Students will learn how to transfer data between various Computer Aided Design (CAD) packages and GIS, and to use a variety of CAD tool operations with GIS.	WECM	





GISC	1147	Focuses on the principles and usage of three-dimensional (3-D) surfaces in Geographic Information Systems (GIS). Students will learn how to prepare Triangulated Irregular Networks (TIN) and incorporate them into 3-D scenes for enhanced data visualization.	WECM	
GISC	1151	An introduction to GIS applications relating to business, marketing, and realty. Students will learn how to collect and manage business location data. Market analysis maps will be created for different types of business.	WECM	
GISC	1153	Provides a basic introduction to the application of Geographic Information Systems (GIS) in education, regardless of the student's field of interest. Students will learn how to incorporate GIS mapping and analysis into their own teaching disciplines. Teaching material will be developed for the individual student's teaching discipline.	WECM	
GISC	1411	Introduction to basic concepts of vector GIS using several industry specific software programs including nomenclature of cartography and geography.	WECM	
GISC	1421	Instruction in GIS data sets including raster-based information such as images or photographs, acquisition of such data, and processing and merging with vector data.	WECM	
GISC	2131	Seminar course designed for the final semester of a degree or certificate in Geographic Information Systems (GIS). Projects will include individual and group studies of GIS applications using the skills acquired in previous courses. The student will produce a professional project and present the results to a panel consisting of peers, instructors, or practicing GIS professionals.	WECM	





GISC	2231	Seminar course designed for the final semester of a degree or certificate in Geographic Information Systems (GIS). Projects will include individual and group studies of GIS applications using the skills acquired in previous courses. The student will produce a professional project and present the results to a panel consisting of peers, instructors, or practicing GIS professionals.	WECM	
GISC	2320	This course focuses on the study of spatial data structures and the display, manipulation, and analysis of geographic information. Students will study the technical aspects involved in spatial data handling, analysis and modeling. Instruction will include theories and procedures associated with the implementation and management of GIS projects. A variety of GIS software packages will be used in the laboratory.	WECM	
GISC	2335	Seminar course designed for the final semester of a degree or certificate in Geographic Information Systems (GIS). Projects will include individual and group studies of GIS applications using the skills acquired in previous courses. The student will produce a professional project and present the results to a panel consisting of peers, instructors, or practicing GIS professionals.	WECM	
GISC	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





GISC	2459	Delivery of geographic data via the Internet. Includes composition of the map features distributed and introduction on the use of markup languages to customize web-based Geographic Information Systems (GIS).	WECM	
GOVT	2306	Origin and development of the Texas constitution, structure and powers of state and local government, federalism and inter-governmental relations, political participation, the election process, public policy, and the political culture of Texas.	ACGM	direct participation, meaningful participation
GOVT	2304	Introductory survey of the discipline of political science focusing on the scope, and methods of the field, and the substantive topics in the discipline including the theoretical foundations of politics, political interaction, political institutions and how political systems function.	ACGM	Institutions
GOVT	2389	An instructional program designed to integrate on-campus study with practical hands-on experience in government. In conjunction with class seminars, the individual student will set specific goas and objectives in the study of human social behavior and/or social institutions.	ACGM	Institutions
GOVT	2311	The influence of Mexican-Americans on United States government and policies with special attention given to participation in local, state, and national politics with particular emphasis on the Southwest and Texas, Mexican-American cultural ascendancy on the nation, impact of immigrants and immigration policy in relation to the US labor market, and evaluation of failures and successes of Mexican-American empowerment strategies.	ACGM	Participation, empower, direct participation, meaningful participation, migrant workers, migrants, migration





GOVT	2305	Origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties and civil rights.	ACGM	Participation, rights, basic rights, direct participation, meaningful participation
GOVT	2107	A study of the United States and state constitutions, with special emphasis on Texas.	ACGM	
GRPH	2309	Theory and techniques for pre-press preparation using industry standard software for final file output. Topics include the procedures and problems involved in computer file preparation ranging from trapping, color separations, and resolutions to printing basics and service bureaus.	WECM	
HALT	2201	Fundamentals of woody plant physiology and growth including techniques and procedures utilized in making sound tree care decisions related to growth and pest and disease control. Topics include design principles of planning and maintenance for city streets, parks and commercial and residential properties.	WECM	planning, fundamental
HAMG	1381	Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	cooperation





HAMG	2381	Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	cooperation
HAMG	2301	An overview of food and beverage management in various hospitality environments. Emphasizes cost controls from procurement to marketing and sales.	WECM	environment, Food
HAMG	1317	The study of the recreation and entertainment industry. Emphasizes sporting and entertainment venues, tourism attractions, and other public and private sector special events.	WECM	events
HAMG	1321	Introduction to the elements of the hospitality industry. This course is offered at El Centro College in the Food and Hospitality Institute to students pursuing knowledge in the Culinary Arts industry and at Richland College in the Travel and Tourism Management program to students pursuing knowledge in hotel/lodging operations.	WECM	Food
HAMG	1242	A study of the working relationship among housekeeping, front office, and maintenance in the lodging industry.	WECM	Housekeeping
HAMG	2302	Overview of the issues surrounding the need for security and loss prevention in the hospitality industry.	WECM	loss, security
HAMG	2330	An application of the essential components of successful convention and meeting planning.	WECM	planning





HAMG	1340	A course in legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor regulations, tax laws, tip reporting, franchise regulations, and product	WECM	safety
HAMG	2337	liability laws. Identification of hospitality building systems and facilities; to include sustainability and risk management.	WECM	sustainability
HAMG	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
HAMG	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
HAMG	1313	Functions of front office operations as they relate to customer service. Includes a study of front office interactions with other departments in the lodging operation.	WECM	
HAMG	1319	An introduction to computers and their relationship as an information system to the hospitality industry. This course includes an overview of industry-specific software.	WECM	
HAMG	1324	Principles and procedures of human resource management in the hospitality industry	WECM	
HAMG	1342	A study of the working relationship among housekeeping, front office, and maintenance in the lodging industry.	WECM	





HAMG	2305	An overview of management and leadership in the hospitality industry with an emphasis on management philosophy, policy formulation, communications, motivation and team building.	WECM	
HAMG	2307	Identification of the core principles of marketing and sales and their impact on the hospitality industry.	WECM	
HAMG	2332	Methods and application of financial management within the hospitality industry. Primary emphasis on sales accountability, internal controls, and report analysis.	WECM	
HART	2457	An advanced course covering the components, accessories, and service of specialized refrigeration units, such as ice machines, soft-serve machines, cryogenics, and cascade systems.	WECM	Access
HART	1303	A basic study of HVAC and refrigeration controls; troubleshooting of control components; emphasis on use of wiring diagrams to analyze high and low voltage circuits; a review of Ohm's law as applied to air conditioning controls and circuits.	WECM	Air
HART	1441	A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems.	WECM	Air
HART	2302	Advanced study in essential elements of commercial air conditioning contracting including duct systems design and/or material takeoff; weight estimating; equipment selection using manufacturers catalog data; job cost estimating, scheduling, preparation of shop drawings and submittals.	WECM	Air





HART	2336	An advanced course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance tests.	WECM	Air
HART	2402	Advanced study in essential elements of commercial air conditioning contracting including duct systems design and/or material takeoff; weight estimating; equipment selection using manufacturers catalog data; job cost estimating, scheduling, preparation of shop drawings and submittals.	WECM	Air
HART	2436	An advanced course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance tests.	WECM	Air
HART	2449	A study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow, and other topics related to heat pump systems.	WECM	Air
HART	1356	Certification training for HVAC refrigerant recovery and recycling. Instruction will provide a review of EPA guidelines for refrigerant recovery and recycling during the installation, service, and repair of all HVAC and refrigeration systems.	WECM	Air, recycling
HART	2443	A study of components, accessories, applications, and installation of air conditioning systems above 25 tons capacity.	WECM	Capacity, access, air
HART	2438	A study of air conditioning system installation, refrigerant piping, condensate disposal, and air cleaning equipment with emphasis on startup and performance testing.	WECM	Clean





HART	1451	Basic heat transfer theory; sensible and latent heat loads; building envelope construction; insulin, lighting, and fenestration types; and conducting energy audit procedures. The course develops energy audit recommends based on local utility rates building use, and construction. Laboratory activities include developing energy audit reports, installing energy saving devices, and measuring energy consumption.	WECM	clean energy
HART	1380	Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	cooperation
HART	2488	A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.	WECM	enable
HART	2445	Study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system.	WECM	loss
HART	1307	An introduction to the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, refrigeration components and safety.	WECM	safety





1403	A basic study of electrical, pressure, and temperature controls including motor starting devices, operating relays, and troubleshooting safety controls and devices. Emphasis on use of wiring diagrams to analyze high and low voltage circuits. A review of Ohms law as applied to A/C controls and circuits.	WECM	safety
1507	An introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationships, safety, refrigeration containment, and refrigeration components.	WECM	safety
1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
1292	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
1394	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
	1507 1291 1292 1391	controls including motor starting devices, operating relays, and troubleshooting safety controls and devices. Emphasis on use of wiring diagrams to analyze high and low voltage circuits. A review of Ohms law as applied to A/C controls and circuits. 1507 An introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationships, safety, refrigeration containment, and refrigeration components. 1291 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1292 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1391 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1394 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1491 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	controls including motor starting devices, operating relays, and troubleshooting safety controls and devices. Emphasis on use of wiring diagrams to analyze high and low voltage circuits. A review of Ohms law as applied to A/C controls and circuits. 1507 An introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationships, safety, refrigeration containment, and refrigeration components. 1291 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1292 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1391 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1394 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1394 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. 1491 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional





HART	1492	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
HART	1494	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
HART	1301	Principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation.	WECM	
HART	1368	Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.	WECM	
HART	1393	This course will provide hands on experience in the installation and wiring of solar systems. Systems are to include grid tied and battery backup.	WECM	
HART	1401	Principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation.	WECM	
HART	1407	An introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationship, safety, refrigeration containment, and refrigeration components.	WECM	





HART	1411	Study of heat transference, motors, pumps and other mechanical devices; solid state switches; photovoltaic plates and energy conversion; thermal dynamics; and solar energy.	WECM
HART	1445	A study of the procedures and principles used in servicing heating systems including gas fired and electric furnaces.	WECM
HART	2334	Theory and application of electrical control devices, electromechanical controls, and/or pneumatic controls.	WECM
HART	2341	A study of components, applications, and installation of air conditioning systems with capacities of 25 tons or less.	WECM
HART	2342	Theory and practical application in the maintenance of commercial refrigeration; medium, and low temperature applications and ice machines.	WECM
HART	2368	Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.	WECM
HART	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM
HART	2401	HVAC standards and concepts with emphasis on the understanding, and documentation of the codes and regulations required for the state mechanical contractors license and local codes.	WECM





HART	2431	Advanced electrical instruction and skill building in installation and serving of air conditioning and refrigeration equipment including detailed instruction in motors and power distribution and introduction to solid state devices.	WECM	
HART	2434	The theory and application of electrical control devices and control circuits including electro-mechanical and pneumatic controls.	WECM	
HART	2442	Theory of and practical application in the maintenance of commercial refrigeration, medium and low temperature applications and ice machines.	WECM	
HDEV	92	This course is an overview of the process of learning, memory, perception, language and critical thinking applied to the college learning community. Special emphasis is placed upon the practical applications of these psychological principles for students. This course specifically provides an opportunity for the student to learn, practice and adopt strategies to support his/her success in college. Topics may include: identifying individual learning styles, self-monitoring, goal-setting, problem solving, critical thinking, stress management, time management, motivation, procrastination, test anxiety, memory, creativity, note-taking, reading college materials, identifying college resources on campus and on the internet, communicating effectively, the importance of supportive relationships and forming study groups, career and academic planning, and the value of diversity. Emphasis is placed on the practical application, techniques, and strategies for each of these topics. This course supports students enrolling in other appropriate remediation	ACGM	effective, opportunity, planning, depletion of resources





HDEV	100	The learning environment is introduced. Career, personal study skills, educational planning, and skills for living are all included. Emphasis is on exploring career and educational alternatives and learning a systematic approach to decision-making. A wide range of learning alternatives is covered, and opportunity is provided to participate in personal skills seminars.	ACGM	environment, opportunity, planning
HDEV	110	Demonstrated competence approved by the instructor is required. This course is designed to assist students in documenting prior learning for the purpose of applying for college credit. Students develop a portfolio which includes a statement of educational/career goals, related non-collegiate experiences which have contributed to college-level learning, and documentation of such experiences.	WECM	
HEMR	1501	Concepts in operation and maintenance of final drive truck systems and undercarriages used on truck and wheel type equipment.	WECM	
HIST	2327	Mexican-American History I addresses historical, economic, social and cultural development of Mexican-Americans to 1900.	ACGM	economic
HIST	2328	Mexican-American History II addresses historical, economic, social and cultural development of Mexican-Americans from 1900 to the present	ACGM	economic
HIST	2301	A survey of the political, social, economic, cultural, and intellectual history of Texas from the pre-Columbian era to the present. Themes that may be addressed in Texas History include: Spanish colonization and Spanish Texas; Mexican Texas; the Republic of Texas; statehood and secession; oil, industrialization, and urbanization; civil rights; and modern Texas.	ACGM	economic, rights, basic rights





HIST	1301	A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government.	ACGM	economic, rights, basic rights, human rights ,settlement, child labor, slavery , migration, torture
HIST	1302	A survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Themes that may be addressed in United States History II include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy.	ACGM	economic, rights, world, basic rights, child labor, migration, urbanization, urban sprawl
HIST	2311	A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from human origins to the 17 th century. Themes that should be addressed in Western Civilization I include the cultural legacies of Mesopotamia, Egypt, Greece, Rome, Byzantium, Islamic civilizations, and Europe through the Middle Ages, Renaissance, and Reformations.	ACGM	economic, world





HIST	2312	A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from the 17 th century to the modern era. Themes that should be addressed in Western Civilization II include absolutism and constitutionalism, growth of nation states, the Enlightenment, revolutions, classical liberalism, industrialization, imperialism, global conflict, the Cold War, and globalism.	ACGM	economic, world, global conflict
HIST	2322	A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the 15th century to the present. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include maritime exploration and transoceanic empires, nation/state formation and industrialization, imperialism, global conflicts and resolutions, and global economic integration. The course emphasizes the development, interaction and impact of global exchange.	ACGM	economic, world, global economic integration
HIST	2321	A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the emergence of human cultures through the 15th century. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include the emergence of early societies, the rise of civilizations, the development of political and legal systems, religion and philosophy, economic systems and trans-regional networks of exchange. The course emphasizes the development, interaction and impact of global exchange.	ACGM	economic, world, global interactions, democracy, Oceania





HIST	2381	The role of African Americans in the history of the United States is studied. The slave trade and slavery in the United States are reviewed. Contributions of African Americans in the U.S. are described. Emphasis is on the political, economic, and sociological factors of African American life in the 20th century.	ACGM	economic, slavery, quality of life
HIST	2389	An instructional program designed to integrate on-campus study with practical hands-on experience in history. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions.	ACGM	Institutions
НІТТ	2360	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable, occupational
HITT	1311	Introduction to health IT standards, health-related data structures, software applications, and enterprise architecture in health care and public health.	WECM	enterprise, micro-enterprise
HITT	2343	Study of quality standards and methodologies in the health information management environment. Topics include licensing, accreditation, compilation and presentation of data in statistical formats, quality management and performance improvement functions, utilization management, risk management, and medical staff data quality issues. Approaches to assessing patient safety issues and implementation of quality management and reporting through electronic systems.	WECM	environment, safety
HITT	2239	Principles of organization and supervision of human, financial and physical resources.	WECM	financial, depletion of resources
HITT	1341	Fundamentals of coding rules, conventions, and guidelines using clinical classification systems.	WECM	fundamental





HITT	1342	Fundamentals of ambulatory coding rules, conventions, and guidelines.	WECM	fundamental
HITT	2335	Development of advanced coding techniques with emphasis on case studies, health records, and federal regulations regarding perspective payment systems and methods of reimbursement.	WECM	pay
HITT	2371	Study of the pathology and general health management of diseases and injuries across the lifespan. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. A study of drug classifications, actions, therapeutic uses, adverse effects, and routes of administration. Does not include dosage calculations.	WECM	quality of life, tobacco use
HITT	2249	Review Health Information Technology (HIT) competencies, skills, and knowledge.	WECM	technology
НІТТ	1253	Concepts of confidentiality, ethics, health care legislation, and regulations relating to the maintenance and use of health information.	WECM	
HITT	1301	Introduction to systems and processes for collecting, maintaining, and disseminating primary and secondary health-related information including content of health record, documentation requirements, registries, indices, licensing, regulatory agencies, forms, and screens.	WECM	
HITT	1345	Examination of delivery systems including organization, financing, accreditation, licensure, and regulatory agencies.	WECM	
HITT	2245	Review of coding competencies and skills in preparation for a coding certification exam.	WECM	





HITT	2246	Advanced concepts of ICD and CPT coding rules, conventions, and guidelines in complex case studies. Investigation of government regulations and changes in health care reporting.	WECM	
HMSY	1342	Study of terrorism and reasons why America is a terrorist target. Includes methods of combating domestic and international terrorism terrorist operations, cyberterrorism, narco-terrorism, the mind of the terrorist, and organized crime's impact on terrorism.	WECM	crime
HMSY	1470	Use of cyber-crime by terrorist organizations and their impact on our nation's information based infrastructure, government, corporate, and private institutions and citizens. Includes a study of the uses of computer forensics and methods to defend against cyber-attacks.	WECM	Institutions
HMSY	1337	Overview of homeland security. Evaluation of the progression of homeland security issues throughout Texas and the United States. An examination of the roles undertaken and methods used by governmental agencies and individuals to respond to those issues.	WECM	security
HMSY	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary.	WECM	technology, events
HMSY	1340	A study of the intelligence community. Includes the role of intelligence and law enforcement. Topics include collection methods, management of operations, classification, production and analysis, and assessment of threat vulnerability. Source development will be conducted.	WECM	





HPRS	2231	This course will cover the exploration and application of management concepts necessary for effective health profession operations.	WECM	effective
HPRS	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course builds on previously acquired knowledge and skills. Lecture and simulated laboratory experience prepares the student to perform patient care utilizing critical thinking and advanced clinical skills. Competency must be demonstrated on effective level of practice and knowledge. Skills achieved include EKG, finger sticking, physical assessment, IV's.	WECM	effective, technology, events
HPRS	2302	A study of medical terminology, word origin, structure, and application with an emphasis on building a professional vocabulary required for employment within the allied health care field.	WECM	employment
HPRS	1203	The course facilitates discussion of grief, loss, and end of life issues. Prepares caregivers to function in setting where communication skills are utilized to provide psychosocial support to persons and their families. This course is also intended to help the student understand the nature of death and dying as well as enable the student to come to grips with one's own personal feelings about death.	WECM	enable, loss, quality of life
HPRS	2201	This course includes the study of pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries.	WECM	malaria





HPRS	1202	This course provides an overview of wellness theory and its application throughout the lifespan with a focus on attitude development, impact of cultural beliefs, and communication of wellness.	WECM	quality of life
HPRS	1204	This course includes a study of the concepts that serve as the foundation for health profession courses, including client care and safety issues, basic client monitoring, and health documentation methods.	WECM	safety
HPRS	1310	A study of drug classifications, actions, therapeutic uses, adverse effects, and routes of administration. Does not include dosage calculations.	WECM	tobacco use
HPRS	2300	This course includes a study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages.	WECM	tobacco use
HPRS	1201	An overview of roles of various members of the health care system, educational requirements, and issues affecting the delivery of health care.	WECM	
HPRS	1205	Introduction to the relationship between legal aspects and ethics in health care with emphasis on responsibilities of health care professionals.	WECM	
HPRS	1206	A study of common medical terminology, word origin, structure, and application.	WECM	
HPRS	2210	This course builds on previously acquired knowledge and skills relevant to the professional development of the student. Lecture and simulated laboratory experiences prepare the student to perform patient care utilizing critical thinking and advanced clinical skills.	WECM	
HRPO	2301	Behavioral and legal approaches to the management of human resources in organizations.	WECM	depletion of resources





1311	Practical application of the principles and concepts of the behavioral sciences to interpersonal relationships in the business and industrial environment.	WECM	environment
1391	This course provides students with a global perspective of the history, development, methodology, ethical and societal issues and trends in Alternative Dispute Resolution.	WECM	ethical
2307	The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences.	WECM	
2319	This interdisciplinary survey examines the diverse cultural, artistic, economic, historical, political, and social aspects of American minority communities. Topics may include race/ethnicity, gender, socioeconomic class, sexual orientation, national origin, age, disability, and religion.	ACGM	economic, disability-sensitive
1305	This interdisciplinary survey examines the different cultural, artistic, economic, historical, political, and social aspects of the Mexican-American/Chicano/a communities. It also covers issues such as dispossession, immigration, transnationalism, and other topics that have shaped the Mexican-American experience.	ACGM	economic, migration
2323	This course is a general study of diverse world cultures. Topics include cultural practices, social structures, religions, arts, and languages.	ACGM	world
1302	This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create.	ACGM	
	2307 2319 1305	behavioral sciences to interpersonal relationships in the business and industrial environment. This course provides students with a global perspective of the history, development, methodology, ethical and societal issues and trends in Alternative Dispute Resolution. The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences. This interdisciplinary survey examines the diverse cultural, artistic, economic, historical, political, and social aspects of American minority communities. Topics may include race/ethnicity, gender, socioeconomic class, sexual orientation, national origin, age, disability, and religion. This interdisciplinary survey examines the different cultural, artistic, economic, historical, political, and social aspects of the Mexican-American/Chicano/a communities. It also covers issues such as dispossession, immigration, transnationalism, and other topics that have shaped the Mexican-American experience. This course is a general study of diverse world cultures. Topics include cultural practices, social structures, religions, arts, and languages. This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to	behavioral sciences to interpersonal relationships in the business and industrial environment. This course provides students with a global perspective of the history, development, methodology, ethical and societal issues and trends in Alternative Dispute Resolution. The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences. This interdisciplinary survey examines the diverse cultural, artistic, economic, historical, political, and social aspects of American minority communities. Topics may include race/ethnicity, gender, socioeconomic class, sexual orientation, national origin, age, disability, and religion. This interdisciplinary survey examines the different cultural, artistic, economic, historical, political, and social aspects of the Mexican-American/Chicano/a communities. It also covers issues such as dispossession, immigration, transnationalism, and other topics that have shaped the Mexican-American experience. This course is a general study of diverse world cultures. Topics include cultural practices, social structures, religions, arts, and languages. This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to





HUMA	1311	This course is an exploration of the purposes and processes in the visual and performing arts (such as music, painting, drama, and dance) and the ways in which they express the values of the Mexican-American/Chicano/a experience.	ACGM	
HUMA	1315	This course is an exploration of the purposes and processes in the visual and performing arts (such as music, painting, architecture, drama, and dance) and the ways in which they express the values of cultures and human experience.	ACGM	
HYDR	1345	Discussion of the fundamentals of hydraulics and pneumatics, components of each system, and the operations, maintenance, and analysis of each system.	WECM	fundamental
HYDR	1445	Fundamentals of hydraulics and types of hydraulic pumps, cylinders, valves, motors, and related systems including operations, maintenance, and system analysis.	WECM	fundamental
IBUS	1354	Analysis of international marketing strategies using market trends, costs, forecasting, pricing, sourcing, and distribution factors. Development of an international marketing plan.	WECM	development
IBUS	1305	The techniques for entering the international marketplace. Emphasis on the impact and dynamics of sociocultural, demographic, economic, technological, and political factors in the foreign trade environment. Topics include patterns of world trade, internationalization of the firm, and operating procedures of the multinational enterprise. Develop a strategic project that internationalizes functional business operations and resolve case problems for international business operations.	WECM	economic, environment, world, enterprise, micro- enterprise





IBUS	2341	Cross-cultural comparisons of management and communications processes. Emphasizes cultural, ethnic, geographic distinctions, and antecedents that affect individual, group, and organizational behavior. May include sociocultural demographics, economics, technology, legal issues, negotiations, and processes of decision making in the international cultural environment.	WECM	economic, technology, environment
IBUS	2366	Practical, general workplace training supported by an individualized learning plan developed by the employer, the college, and the student. A paid position or an unpaid internship applies theory, concepts, and skills involving specialized materials, technology, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with International Business and Trade and demonstrates legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communications using the terminology of the occupation and the business/industry.	WECM	economic, technology, environment, ethical, democracy, safety
IBUS	1300	Develop skills and understanding in global logistics processes, procedures, and regulations used in transportation, physical distribution, warehousing, inventory control, materials, packaging, plant and warehouse location, risk management, and networks for logistics, suppliers, and information. Utilize decision making and case resolution techniques to solve problems and to develop logistical and information networks for supply chain management appropriate for global corporations.	WECM	Housing, representative decision-making





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IBUS	2339	International monetary system, financial markets, flow of capital, foreign exchange, and financial institutions. Includes risk analysis, export-import payments and financing, the preparation of letters of credit, related shipping documentation, electronic fund remittance, and foreign investment financing. Analyze foreign investment and financial environments for countries or regions, prepare letters of credit, resolve problems regarding working capital and foreign exchange, and evaluate trade financing through the SBA, USDOC Export Assistance Centers, and the Export-Import Bank.	WECM	Institutions, environment, pay, developing countries, least developed countries
IBUS	2345	Duties and responsibilities of the licensed customs broker. Includes processes for customs clearance including appraisement, bonded warehouse entry, examination of goods, harmonized tariffs, fees, bonding, penalties, quotas, immediate delivery, consumption, liquidation, computerized systems, laws, and regulations. Prepare for and take a sample exam for the U. S. Customs Broker License Exam; utilize Title 19, Code of Federal Regulations to resolve complex problems involving processes, and documentation enabling you to function smoothly as an importer, trader, international purchasing agent, buyer, or other intermediary.	WECM	Tariffs, common good, trafficking





IBUS	1341	International purchasing or sourcing. Includes the advantages and the barriers of purchasing internationally, global sourcing, procurement technology, and purchasing processes. Emphasizes issues of contract administration, location, and evaluation of foreign suppliers, total cost approach, exchange fluctuations, customs procedures, and related topics. Produce a project in purchasing/buying specific items and utilize exchange rates, channels of distribution, or customs regulations to resolve problems.	WECM	technology
IBUS	1349	Managing electronic business, commerce, and government information systems and technology. Uses appropriate software such as the National Trade Data Base. Emphasizes the role of global strategic information systems as applied to problem solving and current transportation and customs software.	WECM	technology
IBUS	2335	A course in law as it applies to international business transactions in the global political-legal environment. Study of interrelationships among laws of different countries and the legal effects on individuals and business organization. Topics include agency agreements, international contracts and administration, regulation of exports and import, technology transfer, regional transactions, intellectual property, product liability, and legal organization. Select most appropriate legal organization and representation; interpret or prepare related legal documents.	WECM	technology, environment, developing countries, least developed countries





IBUS	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Business, industrial, or service requirements in the international arena will determine specific topics or skill development offered including software, regulatory updates, or market research.	WECM	technology, events
IBUS	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Business, industrial, or service requirements in the international arena will determine specific topics or skill development offered including software, regulatory updates, or market research.	WECM	technology, events
IBUS	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Business, industrial, or service requirements in the international arena will determine specific topics or skill development offered including software, regulatory updates, or market research.	WECM	technology, events
IBUS	1301	Export management processes and procedures. Includes governmental controls and compliance, licensing of products, documentation, commercial invoices, and transportation. Emphasizes human and public relations, management of personnel, finance, and accounting procedures.	WECM	





IBUS	1302	Practices and processes of import management operations including such factors as government controls and compliance. Emphasizes the preparation and understanding of import documents such as customs invoices, packing lists, and commercial invoices.	WECM	
IEIR	1312	Fundamentals of distribution systems including single phase and three phase systems, grounding, ground fault protection, and the National Electrical Safety Code.	WECM	fundamental
IEIR	1412	Fundamentals of distribution systems including single phase and three phase systems, grounding, ground fault protection, and the national electric code. Lab required.	WECM	fundamental
IFWA	1318	An introduction to nutrition including nutrients, digestion and metabolism, menu planning, recipe modification, dietary guidelines and restrictions, diet and disease, and healthy cooking techniques.	WECM	planning
IMED	2315	A study of mark-up language advanced layout techniques for creating web pages. Emphasis on identifying the target audience and producing web sites according to accessibility standards, cultural appearance, and legal issues.	WECM	Access
IMED	2415	A study of mark-up language advanced layout techniques for creating web pages. Emphasis on identifying the target audience and producing web sites according to accessibility standards, cultural appearance, and legal issues.	WECM	Access
IMED	2311	Preparation and enhancement of portfolio to meet professional standards, development of presentation skills, and improvement of job-seeking techniques.	WECM	decent work
IMED	1359	Written communication for digital media environments including professional websites or other digital content.	WECM	environment





IMED	2388	An experience external to the college for an advanced student in the field of interactive media. The internship involves a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience.	WECM	Institutions, occupational outcomes
IMED	2313	Application of the planning and production processes for digital media projects. Emphasis on copyright and other legal issues, content design and production management.	WECM	planning
IMED	2413	Application of the planning and production processes for digital media projects. Emphasis on copyright and other legal issues, content design and production management.	WECM	planning
IMED	2449	Web server software installation, configuration, and maintenance. Includes scripting, website planning, testing, security, production, and marketing.	WECM	planning, security
IMED	1191	Topics address recently identified current events, skills, knowledge, and attitudes or behaviors pertinent to multimedia technology or occupations in the field. Focus is on concepts relevant to the professional development of the student.	WECM	technology, events
IMED	1291	Topics address recently identified current events, skills, knowledge, and attitudes or behaviors pertinent to multimedia technology or occupations in the field. Focus is on concepts relevant to the professional development of the student.	WECM	technology, events





IMED	1391	Topics address recently identified current events, skills, knowledge, and attitudes or behaviors pertinent to multimedia technology or occupations in the field. Focus is on concepts relevant to the professional development of the student.	WECM	technology, events
IMED	1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
IMED	1280	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
IMED	1301	A survey of the theories, elements, and hardware/software components of digital media. Emphasis on conceptualizing and producing digital media presentations.	WECM	
IMED	1316	Instruction in web design and related graphic design issues including mark-up languages, web sites, and browsers.	WECM	
IMED	1345	Exploration of the use of graphics and sound to create interactive digital media applications and/or animations using industry standard authoring software.	WECM	
IMED	1380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





IMED	1416	Instruction in web design and related graphic design issues including mark-up languages, web sites, and browsers.	WECM	
IMED	1445	Exploration of the use of graphics and sound to create interactive multimedia applications and/or animations using industry standard authoring software.	WECM	
IMED	2309	An overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce.	WECM	
IMED	2345	Instruction in the use of scripting languages to create interactive digital media applications.	WECM	
IMED	2349	Web server software installation, configuration, and maintenance. Includes scripting, and website.	WECM	
IMED	2351	Advanced topics in digital media programming including custom scripts for data tracking. Emphasis on developing digital media programs customized to the client's needs.	WECM	
IMED	2409	An overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce.	WECM	





INDS	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. This is an introductory course to the many aspects of restoration, preservation, and adaptive reuse of structures and spaces. Emphasis is placed on the architectural interior. Legal and tax issues are discussed. Restoration projects involving actual structures are studied, along with theoretical problems. Specialized resources are included.	WECM	Adaptive, technology, events, depletion of resources, reuse
INDS	2280	Career-related activities encountered in the student's area of specialization are offered through a cooperative an individualized agreement among the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	cooperation
INDS	2337	A course in the preparation and presentation of a comprehensive interior design portfolio, including resume preparation, employment interview skills and goal setting. Create and modify computer generated drawings.	WECM	employment
INDS	2315	Fundamentals of lighting design, including lamps, luminaries, lighting techniques, and applications for residential and commercial projects.	WECM	fundamental





INDS	2331	Advanced concepts of specialized commercial interior design projects, including hospitality, corporate, retail, health care, institutional, or other specialized commercial design projects. In addition the student will select a project and complete a programming document; which will be completely developed into the capstone interior design project in INDS 1491.	WECM	Institutions
INDS	1345	A study of design principles applied to furniture layout and space planning for commercial interiors.	WECM	planning
INDS	2313	The study of residential spaces, including identification of client needs, programming, standards, space planning, drawings, and presentations.	WECM	planning
INDS	2335	A comprehensive study of complex residential interior design problems, including advanced space planning, documentation, specifications, budgets, and presentation renderings.	WECM	planning
INDS	1291	Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.	WECM	technology, events





INDS	1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. The principles studied in INDS 2331 are expanded to include project management. Advanced construction documents are prepared. The design programming document prepared in INDS 2331 will be developed into a capstone design experience demonstrating mastery of the interior design process from concept to completion.	WECM	technology, events
INDS	1300	Computer-aided drafting, (CAD) as a tool for interior design, illustration, drafting and design development.	WECM	
INDS	1301	A study of basic design concepts with projects in shape, line, value, texture, pattern, spatial illusion, and form.	WECM	
INDS	1311	An introduction to the elements and principles of design, the interior design profession, and the interior design problem-solving process.	WECM	
INDS	1315	A study of materials and textiles, methods of construction and installation, and estimating for interior design applications. Includes a thorough overview of textiles. The student will identify appropriate materials and textiles for specific interior design applications: calculate quantities and costs of materials; and identify quality construction, installation, and craftsmanship.	WECM	
INDS	1319	An introduction to reading and preparing technical construction drawings for interior design; including plans, elevations, details, schedules, dimensions and lettering. Students will be introduced to basic computer-aided drafting.	WECM	





INDS	1351	A historical survey of design in architecture, interiors, furnishings, and decorative elements from the ancient cultures through the Italian Renaissance time period.	WECM	
INDS	1352	A multi-cultural historical survey of design in architecture, interiors, furnishings, and decorative elements from the post-Renaissance period to present time.	WECM	
INDS	1401	A study of basic design concepts with projects in shape, line, value, texture, pattern, spatial illusion, and form. Includes a study of color theory and its applications to interior design.	WECM	
INDS	2305	Skill development in computer-generated graphics and technical drawings for interior design applications. The preparation of detailed working drawings for a commercial building with emphasis on commercial construction methods using BIM software.	WECM	
INDS	2307	The study of interior design textiles including characteristics, care, codes and applications.	WECM	
INDS	2317	A study of rendering techniques for formal interior design presentation, using a variety of media.	WECM	
INDS	2321	An introduction to two- and three-dimensional presentations, including drawings with one- and two-point perspectives, plans, and elevations.	WECM	
INDS	2325	A study of business practices and procedures for interior designers, including professional ethics, project management, marketing, and legal issues.	WECM	
INDS	2330	An overview of building materials, mechanical systems, and construction techniques as applied to interior design. Discussion of codes, project sequencing and the interpretation of detailed working drawings.	WECM	





INEW	2334	Web programming using industry-standard language and data stores.	WECM	generation
INEW	2434	Web programming using industry-standard language and data stores.	WECM	generation
INEW	2370	This course provides the student the opportunity to develop communications skills necessary to interact with clients in all phases of the software development lifecycle. Emphasis is placed upon developing problem-solving techniques and providing appropriate levels of customer service and problem resolution. Students will explore how to best plan for internal staff support and training and will master the complex interactions that occur during the software development release phase between a technology provider, its developers and staff, and the customer.	WECM	technology, opportunity
INEW	1340	Server side web programming concepts to implement solutions for common web programming tasks. Includes Basic ASP.NET web controls, user management and authentication, state management, and development of database-driven web applications.	WECM	
INEW	1440	Server side web programming concepts to implement solutions for common web programming tasks. Includes Basic ASP.NET web controls, user management and authentication, state management, and development of database-driven web applications.	WECM	





INEW	1470	This course emphasizes developing modular interactive programs using the Object-Oriented Paradigm. Students will learn basic animation techniques, basic human-computer interaction concepts, and introductory interactive programming techniques. Scripting Languages may include ActionScript, Lingo, or other comparable language.	WECM	
INEW	2320	Web monitoring and analytical tools to improve and report site functionality.	WECM	
INEW	2430	A comprehensive application of skills learned in previous courses in a simulated workplace. Covers the development, testing, and documenting of a complete software and/or hardware solution. This course may be used as a capstone course for a certificate or degree.	WECM	
INEW	2438	A continuation of advanced Java programming techniques such as servlets and advanced graphical functions.	WECM	
INMT	1345	A study of numerical controlled machine operations in a CAM/CIM environment. Emphasis on standard and computer numerical controlled (CNC) procedures for planning, preparing and operating a computer-assisted machine.	WECM	environment, planning
INMT	1311	A study of the principles and application of computer integrated manufacturing including integration of material handling, manufacturing, and computer hardware and programming.	WECM	
INMT	1319	Exploration of a variety of methods used in manufacturing. Theory and application of processes including but not limited to metal forming, welding, machining, heat treating, plating, assembly procedures, and process control considerations, casting and injection molding.	WECM	





INMT	1343	Computer-assisted applications in integrating engineering graphics and manufacturing. Emphasis on the conversion of a working drawing using computer aided design/computer aided manufacturing (CAD/CAM) software and related input and output devices to translate into machine code.	WECM	
INMT	1417	A study of the applications of industrial automation systems including identification of system requirements, equipment integration, motors, controllers, and sensors. Coverage of set-up, maintenance, and testing of the automated system.	WECM	
INMT	2345	An advanced study of the techniques used in troubleshooting various types of industrial equipment to include mechanical, electrical, hydraulic, and pneumatic systems and their control devices. Emphasis will be placed on the use of schematics and diagrams in conjunction with proper troubleshooting procedures.	WECM	
INMT	2381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
INSR	1351	Study of the risk management decision-making process. Emphasis on identification and analysis of loss exposures and development of alternative techniques for the treatment of each exposure.	WECM	loss
INTC	1457	A study of electric motors and motor control devices common to a modern industrial environment. A presentation of motor characteristics with emphasis on starting, speed control, and stopping systems.	WECM	environment





INTC	1307	Theory and application of instrumentation test equipment. Emphasizes accuracy, limitations of instruments, and calibration techniques.	WECM
INTC	1343	Automatic process control including measuring devices, analog and digital instrumentation, signal transmitters, recorders, alarms, controllers, control valves, and process and instrument diagrams. Includes connection and troubleshooting of loops.	WECM
ITAL	1411	This is the first semester of academic transfer Italian. This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented.	ACGM
ITAL	1412	This is the second semester of academic transfer Italian. This course continues the oral practice, reading, writing, grammar and cultural studies begun in ITAL 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax.	ACGM
ITAL	2311	This is the third semester of academic transfer Italian. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded.	ACGM





ITAL	2312	This is the fourth semester of academic transfer Italian. This course is a continuation of ITAL 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture.	ACGM	
ITCC	2413	WAN technologies and network services required by converged applications in a complex network; enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements.	WECM	enable
ITCC	1440	Describes the architecture, components, and basic operation of routers and explains the basic principles of routing and routing protocols. It also provides an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks.	WECM	environment
ITCC	2454	How to implement, monitor, and maintain routing services in an enterprise network. How to plan, configure, and verify the implementation of complete enterprise LAN and WAN routing solutions using a range of routing protocols in IPv4 and IPv6 environments. Configuration of secure routing solutions to support branch offices and mobile workers.	WECM	environment, micro-enterprise
ITCC	1414	This course covers networking architecture, structure, and functions; introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation for the curriculum.	WECM	fundamental





ITCC	2455	How to implement, monitor, and maintain switching in converged enterprise campus networks. How to plan, configure, and verify the implementation of complex enterprise switching solutions. How to secure integration of VLANs, WLANs, voice and video into campus networks.	WECM	micro-enterprise
ITCC	2441	Overall security processes with particular emphasis on hands-on skills in the following areas: security policy design and management; security technologies, products, and solutions; and secure router design, installation, configuration, and maintenance; AAA and VPN implementation using routers and firewalls.	WECM	security, security
ITCC	1308	Basic concepts of voice over internet protocol (VoIP). Focuses on technology integration of and data transmission in network communications.	WECM	technology
ITCC	1408	Basic concepts of voice over internet protocol (VoIP). Focuses on technology integration of and data transmission in network communications.	WECM	technology
ITCC	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITCC	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITCC	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
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ITCC	1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITCC	2456	How to monitor and maintain complex, enterprise and switched IP networks. Skills learned include the planning and execution of regular network maintenance, as well as support and troubleshooting using technology-based processes and best practices based on systematic and industry recognized approaches.	WECM	technology, planning
ITCC	1340	Internet Protocol addressing techniques, command line interface configuration of switches, Ethernet switching and protocols associated with Virtual Local Area Networks (VLANs).	WECM	
ITCC	2359	Voice Over Internet Protocol (VOIP) architecture, components, and functionality. Includes VOIP signaling, call control, voice dial plans, configuring voice interfaces, dial peers, and quality of service (QoS) technologies.	WECM	
ITCC	2412	CCNA R&S: Scaling Networks (ScaN) covers the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches using advanced protocols.	WECM	
ITCC	2459	Voice Over Internet Protocol (VOIP) architecture, components, and functionality. Includes VOIP signaling, call control, voice dial plans, configuring voice interfaces, dial peers, and quality of service (QoS) technologies.	WECM	





ITDF	1370	An examination of the history of cybercrime and techniques and strategies for investigating computer crime will be the focus of this course. Emphasis is placed on identifying cybercrime activity and applying the concepts, theories and laws of computer crime to the conduct of investigations.	WECM	crime
ITDF	2370	This course covers and explores the areas of economic cybercrime. Emphasis is placed on crimes that are being committed using computers, networks and the Internet and their impact to businesses. Attacks on networks of businesses have resulted in large monetary losses, compromised customer privacy, and fraudulent activity.	WECM	economic, loss, cyber crime
ITDF	1400	A study of the application of digital forensic technology to collect, analyze, document, and present information while maintaining a documented chain of custody. Overview of ethics, crime, and other legal guidelines/regulations/laws. Includes overview of tools used for forensic analysis of digital devices in investigations.	WECM	technology
ITDF	2471	This course provides experience in digital forensics in either the public or private sector. Emphasis is placed on student involvement with business or government agencies dealing with digital forensic analysis or investigation. Upon completion, students should be able to successfully analyze a real-world computer forensic operation and convey the results to the client in written and verbal form. A learning plan is developed by the college and the employer.	WECM	world





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ITDF	1405	Exploration, examination, and assessment of the characteristics and details of digital storage media used in computers systems and small-scale digital devices. Includes experimenting with various tools to reinforce identification of evidentiary data.	WECM	
ITDF	2420	A study of acquiring digital evidence from devices, networks and logs while preserving the evidentiary chain. Includes the legal aspects of the search and seizure of computers and related equipment/information.	VECM	
ITDF	2425	Skills-based course in the applications of forensic analysis software and hardware tools.	NECM	
ITDF	2430	Digital forensic analysis, report preparation, and evidence presentation. Emphasizes balancing legal and technical aspects of cases where digital forensics is employed.	VECM	
ITDF	2435	Comprehensive application of skills learned in previous digital forensics courses in a simulated crime scene or workplace investigation. Includes collection, analysis, and presentation of digital data and evidence in a problembased case study format.	WECM	
ITMC	2406	Advanced concepts designing a data warehouse and populating data marts by using Data Transformation Services (DTS) in Microsoft® SQL Server. Licensing/Certification Agency: Microsoft® Corporation.	VECM	
ITMC	2437	Mastering programming and implementing a database solution by using SQL Server. Licensing/Certification Agency: Microsoft Corporation.	WECM	





ITMT	2404	This course covers managing and maintaining a server infrastructure, planning and implementing a highly available enterprise infrastructure, planning and implementing a server virtualization infrastructure, and designing and implementing identity and access solutions. Licensing/Certification Agency: Microsoft Corporation.	WECM	Access, planning
ITMT	1450	Implementing routing; implementing, managing, and maintaining Dynamic Host Configuration Protocol (DHCP) Domain Name System (DNS), and Windows Internet Name Service (WINS); securing Internet Protocol (IP) traffic with Internet Protocol security (IPSec) and certificates; implementing a network access infrastructure by configuring the connections for remote access clients; and managing and monitoring network access.	WECM	Access, security, security
ITMT	2330	Designing a Microsoft Active Directory and network infrastructure for a Microsoft Windows Server 2003 environment. Intended for systems engineers who are responsible for designing directory service and/or network infrastructures.	WECM	environment
ITMT	2402	A study of Active Directory Service on Windows Server 2008. Concepts of resource management within an enterprise network environment.	WECM	environment
ITMT	2430	Designing a Microsoft Active Directory and network infrastructure for a Microsoft Windows Server 2003 environment. Intended for systems engineers who are responsible for designing directory service and/or network infrastructures.	WECM	environment





ITMT	1340	Managing accounts and resources, maintaining server resources, monitoring server performance, and safeguarding data in a Microsoft Windows Server 2003 environment.	WECM	environment, depletion of resources
ITMT	1440	Managing accounts and resources, maintaining server resources, monitoring server performance, and safeguarding data in a Microsoft Windows Server 2003 environment.	WECM	environment, depletion of resources
ITMT	2300	Windows Server 2003 directory service environment. Includes forest and domain structure; Domain Name System (DNS); site topology and replication; organizational unit structure and delegation of administration; Group Policy; and user, group, and computer account strategies.	WECM	environment, forest, reforestation
ITMT	2400	Windows Server 2003 directory service environment. Includes forest and domain structure; Domain Name System (DNS); site topology and replication; organizational unit structure and delegation of administration; Group Policy; and user, group, and computer account strategies.	WECM	environment, forest, reforestation
ITMT	2340	Assembling the design team, modeling threats, and analyzing security risks in order to meet business requirements for securing computers in a networked environment. Includes decision-making skills through an interactive tool that simulates real-life scenarios. Focuses on collecting information and sorting through details to resolve a given security requirement.	WECM	environment, security





ITMT	2440	Assembling the design team, modeling threats, and analyzing security risks in order to meet business requirements for securing computers in a networked environment. Includes decision-making skills through an interactive tool that simulates real-life scenarios. Focuses on collecting information and sorting through details to resolve a given security requirement.	WECM	environment, security
ITMT	1355	Planning and maintaining a Windows Server 2003 network infrastructure.	WECM	planning
ITMT	1455	Planning and maintaining a Windows Server 2003 network infrastructure.	WECM	planning
ITMT	2405	This course covers planning and deploying a server infrastructure; designing and implementing network infrastructure services; designing and implementing network access services and Active Directory infrastructure. Licensing/Certification Agency: Microsoft Corporation.	WECM	planning
ITMT	2401	A course in Windows Server 2008 networking infrastructure to include installation, configuration, and troubleshooting of Internet Protocol (IP) addressing, network services and security.	WECM	security
ITMT	1350	Implementing routing; implementing, managing, and maintaining Dynamic Host Configuration Protocol (DHCP) Domain Name System (DNS), and Windows Internet Name Service (WINS); securing Internet Protocol (IP) traffic with Internet Protocol security (IPSec) and certificates; implementing a network access infrastructure by configuring the connections for remote access clients; and managing and monitoring network access.	WECM	security, security





ITMT	1402	A study of Windows Vista operating system; installation, configuration, and troubleshooting; file management; users accounts and permissions; security features; network connectivity; setup of external devices; optimization and customization; and deployment of application, with handon experience.	WECM	security, security
ITMT	1406	Describe management tools available in Windows Server operating systems. Install and perform post-installation configuration of Windows Server operating systems using domain controllers and perform administrative tasks. Describe virtualization techniques. Create, configure and monitor user accounts in Active Directory Configure and troubleshoot IPv4 communication. Configure security setting using Group Policy. Implement DHCP, DNS, IPv6, local storage, file and print services. Licensing/Certification Agency: Microsoft Corporation.	WECM	security, security
ITMT	1457	A study of administrative tasks needed to maintain a Windows Server operating system including user and group management, network assess and data security. Topics include how to implement, configure and manage Group Policy infrastructure, Group Policy objects (GPOs) using links, security groups, WMI filters, loopback processing, preference targeting and troubleshooting policy application. Licensing/Certification Agency: Microsoft Corporation.	WECM	security, security





ITMT	1458	A study of Windows operating system; installation, configuration, and troubleshooting; file management; users accounts and permissions; security features; network connectivity; setup of external devices; optimization and customization; and deployment of application, with handon experience. Licensing/Certification Agency: Microsoft Corporation.	WECM	security, security
ITMT	2451	Knowledge and skills for the entry-level server administrator or information technology (IT) professional to implement, monitor and maintain Windows Server 2008 servers.	WECM	technology
ITMT	1400	Addresses the implementation and desktop support needs of customers that are planning to deploy and support Microsoft Windows XP Professional in a variety of standalone and network operating system environments. Indepth, hands-on training for Information Technology (IT) professionals responsible for the planning, implementation, management, and support of Windows XP Professional.	WECM	technology, environment, planning
ITMT	1300	Addresses the implementation and desktop support needs of customers that are planning to deploy and support Microsoft Windows XP Professional in a variety of standalone and network operating system environments. Indepth, hands-on training for Information Technology (IT) professionals responsible for the planning, implementation, management, and support of Windows XP Professional.	WECM	technology, environment, planning, wind





ITMT	2346	Addresses the Microsoft Certified Systems Administrator (MCSA) and Microsoft Certified Systems Engineer (MCSE) skills path for information technology security practitioners. Focuses on Microsoft Windows Server 2003 infrastructure solutions. Includes client-focused content where appropriate. Provides functional skills in planning and implementing infrastructure security. Licensing/Certification Agency: Microsoft Corporation.	WECM	technology, planning, security
ITMT	2446	Addresses the Microsoft Certified Systems Administrator (MCSA) and Microsoft Certified Systems Engineer (MCSE) skills path for information technology security practitioners. Focuses on Microsoft Windows Server 2003 infrastructure solutions. Includes client-focused content where appropriate. Provides functional skills in planning and implementing infrastructure security. Licensing/Certification Agency: Microsoft Corporation.	WECM	technology, planning, security
ITMT	1303	Introductory coverage of the technical skills required to write basic Transact-SQL queries for Microsoft SQL Server. Licensing/Certification Agency: Microsoft Corporation.	WECM	
ITMT	1403	Introductory coverage of the technical skills required to write basic Transact-SQL queries for Microsoft SQL Server. Licensing/Certification Agency: Microsoft Corporation.	WECM	
ITMT	1405	Advanced configuration tasks required to deploy, manage, and maintain a Windows Server operating system infrastructure. Additional topics include fault tolerance, certificate services, and identity federation. Licensing/Certification Agency: Microsoft Corporation.	WECM	





ITMT	2303	In-depth coverage of the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft SQL Server databases. Licensing/Certification Agency: Microsoft Corporation.	WECM
ITMT	2350	Updating and supporting a reliable, secure messaging infrastructure used for creating, storing, and sharing information by using Microsoft Exchange Server 2003. Includes a significant amount of hands-on practices, discussions, and assessments to assist students in becoming proficient in the skills necessary to update and support Exchange Server 2003.	WECM
ITMT	2403	In-depth coverage of the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft SQL Server databases. Licensing/Certification Agency: Microsoft Corporation.	WECM
ITMT	2422	A course in the installation, configuring, maintaining, and troubleshooting of an Internet Information Services (IIS) 7.0 web server and Terminal Services in Windows Server 2008.	WECM
ITMT	2450	Updating and supporting a reliable, secure messaging infrastructure used for creating, storing, and sharing information by using Microsoft Exchange Server 2003. Includes a significant amount of hands-on practices, discussions, and assessments to assist students in becoming proficient in the skills necessary to update and support Exchange Server 2003.	WECM
ITMT	2456	A capstone course in the design of Windows Server 2008 Enterprise Network Infrastructure that meets business and technical IT requirements for network services.	WECM





ITNW	1354	Implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment.	WECM	environment
ITNW	1413	Implement and support virtualization of clients in a networked computing environment. This course explores installation, configuration, and management of computer virtualization workstation and servers.	WECM	environment
ITNW	1454	Implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment.	WECM	environment
ITNW	2332	Installation, configuration, management, and support of a network infrastructure in a large computing environment that uses a version of the UNIX server operating system.	WECM	environment
ITNW	2455	An in-depth study of the installation, configuration, management and troubleshooting of a virtualized server environment.	WECM	environment
ITNW	2455	An in-depth study of the installation, configuration, management and troubleshooting of a virtualized server environment.	WECM	environment
ITNW	2456	Design, implement, and support a network directory infrastructure in a multi-domain environment.	WECM	environment
ITNW	2435	Troubleshoot and support networks with emphasis on solving real world problems in a hands-on environment. Topics include troubleshooting and research techniques, available resources, and network management hard/software.	WECM	environment, world, depletion of resources





ITNW	1274	This course provides an introduction to the complexities of managing Web site development projects. Students will learn cost specification, budgeting, schedule construction, negotiation, team-building, time management and status reporting skills. Legal issues like intellectual property rights, contract agreements, ethics and confidentiality will be described.	WECM	rights, basic rights
ITNW	1351	Design, plan, implement, operate, and troubleshoot Wireless Local Area Networks (WLANs). Includes WLAN design, installation, and configuration; and WLAN security issues and vendor interoperability strategies.	WECM	security
ITNW	1451	Design, plan, implement, operate, and troubleshoot Wireless Local Area Networks (WLANs). Includes WLAN design, installation, and configuration; and WLAN security issues and vendor interoperability strategies.	WECM	security
ITNW	2472	Designing a virtual infrastructure which meets an organization's constraints, requirements and business objectives concerning availability, scalability, manageability, and security	WECM	security
ITNW	1358	Assists individuals in preparing for the Computing Technology Industry Association (CompTIA) Network+ certification exam and career as a network professional.	WECM	technology, association
ITNW	1458	Assists individuals in preparing for the Computing Technology Industry Association (CompTIA) Network+ certification exam and career as a network professional.	WECM	technology, association
ITNW	1192	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events





ITNW	1292	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITNW	1392	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITNW	1492	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITNW	1437	Introduction to the Internet with emphasis on using the World Wide Web to locate, transfer, and publish information. Survey of emerging technologies on the Internet.	WECM	world
ITNW	1280	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITNW	1281	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITNW	1308	Skills development in the management of client as desktop operating systems.	WECM	
ITNW	1316	An introduction to Network administration.	WECM	
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ITNW	1325	Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.	WECM
ITNW	1345	Provides students with the knowledge and skills necessary to install, configure, and administer Network Directory service.	WECM
ITNW	1353	Installing, configuring, managing, and supporting a network infrastructure.	WECM
ITNW	1380	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM
ITNW	1408	Skills development in the management of client as desktop operating systems.	WECM
ITNW	1416	An introduction to Network administration.	WECM
ITNW	1425	Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.	WECM
ITNW	1435	An introduction to data storage-related technologies. Topics include data storage for cloud, Big Data, mobile, social media, and software-defined data centers. Provides a strong understanding of storage technologies and prepares students for advanced concepts, technologies, and processes.	WECM
ITNW	1440	Installation and configuration of desktop virtualization components.	WECM





ITNW	1445	Provides students with the knowledge and skills necessary to install, configure, and administer Network Directory service.	WECM	
ITNW	1453	Installing, configuring, managing, and supporting a network infrastructure	WECM	
ITNW	1480	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITNW	2281	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITNW	2312	Router configuration for local area networks and wide area networks. Includes Internet Protocol (IP) addressing techniques and intermediate routing protocols.	WECM	
ITNW	2313	Maintain network hardware devices. Topics include network cables, servers, and workstations; network connectivity devices such as routers, hubs, bridges, gateways, repeaters, and uninterruptible power supplies; and other networking hardware devices.	WECM	
ITNW	2321	Set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on networking operating systems.	WECM	
ITNW	2350	A case study in Convergence Technologies requiring a network engineer to study a problem and design a network solution for an enterprise network.	WECM	





ITNW	2354	Designing, installing, configuring, maintaining, and managing an Internet/Intranet server.	WECM
ITNW	2412	Router configuration for local area networks and wide area networks. Includes Internet Protocol (IP) addressing techniques and intermediate routing protocols.	WECM
ITNW	2413	Maintain network hardware devices. Topics include network cables, servers, and workstations; network connectivity devices such as routers, hubs, bridges, gateways, repeaters, and uninterruptible power supplies; and other networking hardware devices.	WECM
ITNW	2421	Set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on networking operating systems.	WECM
ITNW	2450	A case study in Convergence Technologies requiring a network engineer to study a problem and design a network solution for an enterprise network.	WECM
ITNW	2452	Administering SQL Server is a skills development course in the installation, configuration, administration, and troubleshooting of SQL Servers client/server database management system version.	WECM
ITNW	2454	Designing, installing, configuring, maintaining, and managing an Internet server.	WECM
ITNW	2459	Instruction in the installation, configuration, and implementation of web servers.	WECM
ITNW	2471	Configuring and maintaining a highly available and scalable virtual infrastructure using commonly available virtualization software.	WECM
ITNW	2473	Installation and configuration of desktop virtualization components.	WECM





ITSC	1456	Designed for Solaris certification. Provides students with the knowledge to read, write, and debug C shell scripts. Includes development of simple scripts to automate frequently executed sequences of commands. Also covers the use of conditional logic, user interaction, loops, and menus to enhance the productivity and effectiveness. Licensing/Certification Agency: Sun Microsystems.	WECM	effective
ITSC	1342	Reading, writing, and debugging shell scripts. Development of scripts to automate frequently executed sequences of commands. Covers conditional logic, user interaction, loops, and menus to enhance the productivity and effectiveness of the user. Intended for programmers who are familiar with operating environments and reading and writing various shell scripts.	WECM	effective, environment
ITSC	1442	Reading, writing, and debugging shell scripts. Development of scripts to automate frequently executed sequences of commands. Covers conditional logic, user interaction, loops, and menus to enhance the productivity and effectiveness of the user. Intended for programmers who are familiar with operating environments and reading and writing various shell scripts.	WECM	effective, environment
ITSC	1452	Designed for Solaris certification. Addresses how to install and maintain Sun systems, configure and troubleshoot the Network File System (NFS) environment, and configure the Network Information Services (NIS) environment. Licensing/Certification Agency: Sun Microsystems.	WECM	environment





ITSC	1454	Designed for Solaris certification. Provides students with the necessary knowledge and skills to perform the essential system administration tasks in a Solaris Operating Environment. Includes stand-alone installation, file system management, backup procedures, process control, user administration, and device management. Licensing/Certification Agency: Sun Microsystems.	WECM	environment
ITSC	1429	Designed for the student interested in Solaris certification, this course is for new users and covers how to use the basic Solaris operating environment. Topics include fundamental command-line features of the Solaris operating environment file system, file permissions, the text editor, command shells, and basic network use. Licensing/Certification Agency: Sun Microsystems.	WECM	environment, fundamental
ITSC	1347	Advanced UNIX workstation administration skills in a network environment. Includes system security features.	WECM	environment, security
ITSC	1447	Advanced UNIX workstation administration skills in a network environment. Includes system security features.	WECM	environment, security
ITSC	1301	Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources. Explores integration and application in business and other segments in society. Fundamentals of computer problem-solving and programming may be discussed. Examines applications and software relating to a specific curricular area.	WECM	fundamental





ITSC	1316	Introduction to the Linux operating system. Includes Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation. Emphasizes hands-on setup, administration, and management of Linux. Also covers maintaining and securing reliable Linux systems.	WECM	security
ITSC	1416	Introduction to the Linux operating system. Includes Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation. Emphasizes hands-on setup, administration, and management of Linux. Also covers maintaining and securing reliable Linux systems.	WECM	security
ITSC	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITSC	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITSC	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITSC	1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITSC	1171	Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources.	WECM	





ITSC	1280	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component	WECM	
ITSC	1281	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITSC	1307	Introduction to the UNIX operating system including multi- user concepts, terminal emulation, use of system editor, basic UNIX commands, and writing script files. Includes introductory system management concepts.	WECM	
ITSC	1315	Use of project management software for developing a project plan including timelines, milestones, scheduling, life cycle phases, management frameworks, skills, processes, and tools.	WECM	
ITSC	1358	Basic UNIX workstation administration. Includes installing a stand-alone system, adding users, backing up and restoring file systems, and adding new printer support. Emphasis on the procedures needed to perform these system administration tasks. Introduces the concept of the system and disk management. This course is cross-listed as ITSC 1458.	WECM	





ITSC	1380	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITSC	1381	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITSC	1401	Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources.	WECM	
ITSC	1405	Introduction to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities.	WECM	
ITSC	1407	Introduction to the UNIX operating system including multi- user concepts, terminal emulation, use of system editor, basic UNIX commands, and writing script files. Includes introductory system management concepts.	WECM	
ITSC	1409	Introduction to business productivity software suites using word processing, spreadsheets, databases, and/or presentation software.	WECM	
ITSC	1411	A study of the AS/400 operating system including multi- user concepts, terminal emulation, use of system editor, basic AS/400 menus, commands, and help screens. Topics include introductory system management concepts and file management.	WECM	





ITSC	1415	Use of project management software for developing a project plan including timelines, milestones, scheduling, life cycle phases, management frameworks, skills, processes, and tools.	WECM
ITSC	1421	Custom operating system installation, configuration, and troubleshooting. Management of file systems, memory, and peripheral devices.	WECM
ITSC	1425	Current personal computer hardware including assembly, upgrading, setup, configuration and troubleshooting.	WECM
ITSC	1458	Basic UNIX workstation administration. Includes installing a stand-alone system, adding users, backing up and restoring file systems, and adding new printer support. Emphasis on the procedures needed to perform these system administration tasks. Introduces the concept of the system and disk management.	WECM
ITSC	1480	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM
ITSC	2421	Intermediate study of computer applications from business productivity software suites. Instruction in embedding data and linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software.	WECM
ITSC	2425	Provides instruction in Advance Open-source Linux operating system. Develops LDAP directory services to all your clients, support users, remotely, installing and configuring network services.	WECM





ITSC	2431	Advanced use of business productivity software including complex assignments that require advanced formatting and functionality.	WECM	
ITSC	2435	Utilization of appropriate application software to solve advanced problems and generate customized solutions.	WECM	
ITSC	2437	Continued study of the UNIX operating system commands. Includes topics such as CGI and scripting languages.	WECM	
ITSC	2439	Diagnosis and solution of users hardware and software related problems with on-the-job and/or simulated projects.	WECM	
ITSE	2304	Visual Basic.NET applications to access data from a database. Emphasizes Object-Oriented Programming (OOP) and database programming with ADO.NET.	WECM	Access
ITSE	2338	C# applications to access data from a database. Emphasizes Object-Oriented Programming (OOP) and database programming with ADO.NET.	WECM	Access
ITSE	2359	Advanced programming techniques including file access methods, data structures, modular programming, program testing, and documentation.	WECM	Access
ITSE	2404	Visual Basic.NET applications to access data from a database. Emphasizes Object-Oriented Programming (OOP) and database programming with ADO.NET.	WECM	Access
ITSE	2409	Database development using database programming techniques emphasizing database structures, modeling, and database access.	WECM	Access
ITSE	2431	Further application of C++ programming techniques including file access, abstract data structures, class inheritance, and other advanced techniques.	WECM	Access





ITSE	2437	Comprehensive coverage of low-level computer operations and architecture. Includes design, development, testing, implementation, and documentation of programs; language syntax; data manipulation; input/output devices and operations; and file access.	WECM	Access
ITSE	2439	Further applications of windows programming techniques using C++ including file access methods, data structures, modular programming, program testing, and documentation.	WECM	Access
ITSE	2449	Advanced Visual Basic programming including file access methods, data structures, modular programming, program testing and documentation.	WECM	access
ITSE	2459	Advanced programming techniques including file access methods, data structures, modular programming, program testing, and documentation.	WECM	access
ITSE	1333	An overview of different mobile platforms and their development environments. Design, write, and test small interactive programs for mobile platforms.	WECM	environment
ITSE	2310	Course explores developing applications for iOS devices. Will include Objective-C programming, use of the iOS SDK environment, and current programming issues in the iOS environment.	WECM	environment
ITSE	2346	Skill development in the use of Forms in a Developer environment. Topics include the use of Object Navigator and Virtual Graphics System (VGS), Layout Editor and Menu options.	WECM	environment
ITSE	2410	Course explores developing applications for iOS devices. Will include Objective-C programming, use of the iOS SDK environment, and current programming issues in the iOS environment.	WECM	environment





ITSE	1359	Introduction to scripting languages including basic data types, control structures, regular expressions, input/output, and textual analysis.	WECM	expression, expression, generation
ITSE	1307	Introduction to computer programming using C++. Emphasis on the fundamentals of object-oriented design with development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files.	WECM	fundamental
ITSE	1407	Introduction to computer programming using C++. Emphasis on the fundamentals of object-oriented design with development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files.	WECM	fundamental
ITSE	1422	Introduction to programming using C. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files.	WECM	fundamental
ITSE	1431	Introduction to computer programming using Visual Basic. Emphasizes the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files.	WECM	fundamental
ITSE	2305	Introduction to computer programming for windows. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files.	WECM	fundamental





ITSE	2321	Introduction to object-oriented programming. Emphasis on the fundamentals of design with classes, including development, testing, implementation, and documentation. Includes object-oriented programming techniques, classes, and objects.	WECM	fundamental
ITSE	2356	Fundamentals of the tasks and functions required of a database administrator using Oracle.	WECM	fundamental
ITSE	2405	Introduction to computer programming for windows. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files.	WECM	fundamental
ITSE	2417	Introduction to object oriented Java programming including the fundamental syntax and semantics of Java for applications and web applets.	WECM	fundamental
ITSE	2421	Introduction to object-oriented programming. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes object-oriented programming techniques, classes, and objects.	WECM	fundamental
ITSE	2456	Fundamentals of the tasks and functions required of a database administrator using Oracle.	WECM	fundamental
ITSE	1356	Introduction of skills and practices related to Extensible Markup Language (XML). Includes Document Type Definition (DTD), well-formed and valid XML documents, XML schemes, and Extensible Style Language (XSL).	WECM	generation
ITSE	1350	Introduction to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools.	WECM	planning





ITSE	1450	Introduction to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools.	WECM	planning
ITSE	1303	Introduction to fundamentals of SQL and relational databases. Topics covered include database terminology and concepts; planning, defining, and designing a database; designing and generating tables; devising and processing queries; installing MySQL and troubleshooting syntax.	WECM	planning, fundamental
ITSE	1406	Introduction to PHP including design of web-based applications, arrays, strings, regular expressions, file input/output, e-mail and database interfaces, stream and network programming, debugging, and security. Emphasizes hands-on programming skills necessary to develop secure and reliable PHP based web applications.	WECM	security, expression, expression, generation
ITSE	1306	Introduction to PHP including design of web-based applications, arrays, strings, regular expressions, file input/output, e-mail and database interfaces, stream and network programming, debugging, and security. Emphasizes hands-on programming skills necessary to develop secure and reliable PHP based web applications.	WECM	security, expression, generation
ITSE	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITSE	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events





ITSE	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITSE	1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
ITSE	1301	Designing and publishing Web documents according to World Wide Web Consortium (W3C) standards. Emphasis on optimization of graphics and images and exploration of the tools available for creating and editing Web documents.	WECM	world
ITSE	1401	Designing and publishing Web documents according to World Wide Web Consortium (W3C) standards. Emphasis on optimization of graphics and images and exploration of the tools available for creating and editing Web documents.	WECM	world
ITSE	1280	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITSE	1281	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





ITSE	1302	Introduction to computer programming including development, testing, implementation, and documentation.	WECM
ITSE	1311	Skill development in web page programming including mark-up and scripting languages.	WECM
ITSE	1329	Problem-solving applying structured techniques and representation of algorithms using design tools. Includes an introduction to programming, testing, evaluation, and documentation.	WECM
ITSE	1330	A study of C# syntax, including data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, and exception handling.	WECM
ITSE	1332	A study of Visual Basic.NET (VB.NET) including data types, control structures, functions, syntax and semantics of the language, classes, class relationships, and exception handling.	WECM
ITSE	1345	An introduction to the design and creation of relational databases using Oracle. Topics include storing, retrieving, updating, and displaying data using Structured Query Language (SQL).	WECM
ITSE	1346	Introduction to the analysis and utilization of data requirements and organization into normalized tables.	WECM
ITSE	1347	Designing and developing enterprise applications using Microsoft Visual Basic.Net in the Microsoft.Net Framework. Includes reference types, class relationships, polymorphism, operators overloading, and creating and handling exceptions.	WECM





ITSE	1380	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM
ITSE	1381	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM
ITSE	1402	Introduction to computer programming including development, testing, implementation, and documentation.	WECM
ITSE	1411	Skill development in web page programming including mark-up and scripting languages.	WECM
ITSE	1429	Problem-solving applying structured techniques and representation of algorithms using design tools. Includes an introduction to programming, testing, evaluation, and documentation.	WECM
ITSE	1430	A study of C# syntax including data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, and exception handling.	WECM
ITSE	1432	A study of Visual Basic.NET (VB.NET) including data types, control structures, functions, syntax and semantics of the language, classes, class relationships, and exception handling.	WECM





ITSE	1445	An introduction to the design and creation of relational databases using Oracle. Topics include storing, retrieving, updating, and displaying data using Structured Query Language (SQL).	WECM	
ITSE	1456	Introduction of skills and practices related to Extensible Markup Language (XML). Includes Document Type Definition (DTD), well-formed and valid XML documents, XML schemes, and Extensible Style Language (XSL).	WECM	
ITSE	1480	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITSE	2302	Techniques for Web development. Includes server-side and client-side scripting.	WECM	
ITSE	2313	Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools.	WECM	
ITSE	2334	Continuation of Visual Basic.NET programming using advanced features of the .NET Framework Class Library.	WECM	
ITSE	2353	Continuation of C# programming using advanced features of the .NET Framework Class Library.	WECM	
ITSE	2354	A continuation of Oracle SQL. Topics include hierarchical queries, set based queries, correlated subqueries, scripting, and scripting generation.	WECM	





ITSE	2358	A continuation of Oracle Database Administration I. Topics include recovery procedures, logical backups, standby database capabilities, and performance tuning of the Oracle Server. Common performance problems and the use of diagnostic tools to troubleshoot and optimize throughput will be discussed.	WECM
ITSE	2402	Techniques for Web development. Includes server-side and client-side scripting.	WECM
ITSE	2413	Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools.	WECM
ITSE	2433	Skills development in the implementation of a database solution using Microsoft® SQL Server client/server database management system.	WECM
ITSE	2434	Continuation of Visual Basic.NET programming using advanced features of the .NET Framework Class Library.	WECM
ITSE	2438	C# applications to access data from a database. Emphasizes Object-Oriented Programming (OOP) and database programming with ADO.NET.	WECM
ITSE	2444	A practical application course for modeling and designing an Oracle data warehouse using case studies.	WECM
ITSE	2445	Design and analysis of data structures and their operations.	WECM
ITSE	2453	Continuation of C# programming using advanced features of the .NET Framework Class Library.	WECM
ITSE	2454	A continuation of Oracle SQL. Topics include hierarchical queries, set based queries, correlated subqueries, scripting, and scripting generation.	WECM
ITSE	2457	Application of advanced object-oriented programming techniques such as abstract data structures, class inheritance, virtual functions, and exception handling.	WECM





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ITSE	2458	A continuation of Oracle Database Administration I. Topics include recovery procedures, logical backups, standby database capabilities, and performance tuning of the Oracle Server. Common performance problems and the use of diagnostic tools to troubleshoot and optimize throughput will be discussed.	WECM	
ITSW	1280	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITSW	1281	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITSW	1307	Introduction to database theory and the practical applications of a database. Topics include terminology, database design, table structures, report forms, queries, and macros.	WECM	
ITSW	1310	Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development.	WECM	





ITSW	1380	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM
ITSW	1381	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM
ITSW	1401	An overview of the production of documents, tables, and graphics. Topics include entry and editing, reformatting, search and replace, cut-and-paste, file and print operations, and spelling checkers.	WECM
ITSW	1404	Instruction in the concepts, procedures, and application of electronic spreadsheets. Topics include formula creation, template design, formatting features, statistical, mathematical and financial functions, file operations, report generation, graphics, and introduction to macro programming.	WECM
ITSW	1407	Introduction to database theory and the practical applications of a database. Topics include terminology, database design, table structures, report forms, queries and macros.	WECM
ITSW	1410	Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development.	WECM





ITSW	1480	Career-related activities, encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITSW	2434	Advanced techniques for developing and modifying spreadsheets. Includes macros and data analysis functions.	WECM	
ITSW	2437	Advanced concepts of database design and functionality. Topics include advanced data manipulation features, importing and exporting data, and advanced macros and programming.	WECM	
ITSY	2417	Development of information security policies, standards, and guidelines for an organization. Includes Demilitarized Zone (DMZ), antivirus, Virtual Private Network (VPN), wireless communications, remote access, and other critical administrative and operational security policies. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. Emphasizes wireless security goals of availability, integrity, accuracy, and confidentiality in the design, planning, implementing, operating, and troubleshooting of wireless LAN along with appropriate planning and administrative controls.	WECM	Access, planning, security, demilitarize
ITSY	2472	The course combines an ethical hacking methodology with the hands-on application of security tools to secure systems. Students are introduced to common countermeasures that effectively reduce and/or mitigate attacks.	WECM	effective, ethical, security





ITSY 2486 A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. ITSY 2486 A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. ITSY 1300 An introduction to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies, and controls is also discussed. ITSY 1400 An introduction to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies, and controls is also discussed. ITSY 1400 An introduction to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies, and controls is also discussed. ITSY 2345 This is a practical application and comprehensive course that includes the planning, design, and construction of a complex network that will sustain an attack, document events, and mitigate the effects of an attack. WECM events, planning events, plannin					
to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. ITSY 1300 An introduction to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies, and controls is also discussed. ITSY 1400 An introduction to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies, and controls is also discussed. ITSY 2345 This is a practical application and comprehensive course that includes the planning, design, and construction of a complex network that will sustain an attack, document events, and mitigate the effects of an attack. ITSY 2445 This is a practical application and comprehensive course that includes the planning, design, and construction of a complex network that will sustain an attack, document events, and mitigate the effects of an attack.	ITSY	2286	to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and	WECM	enable, occupational theory
vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies, and controls is also discussed. ITSY 1400 An introduction to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies, and controls is also discussed. ITSY 2345 This is a practical application and comprehensive course that includes the planning, design, and construction of a complex network that will sustain an attack, document events, and mitigate the effects of an attack. ITSY 2445 This is a practical application and comprehensive course that includes the planning, design, and construction of a complex network that will sustain an attack, document events, planning events, planning events, planning events, planning events, planning	ITSY	2486	to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and	WECM	enable, occupational theory
vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies, and controls is also discussed. ITSY 2345 This is a practical application and comprehensive course that includes the planning, design, and construction of a complex network that will sustain an attack, document events, and mitigate the effects of an attack. ITSY 2445 This is a practical application and comprehensive course that includes the planning, design, and construction of a complex network that will sustain an attack, document events, planning WECM WECM events, planning	ITSY	1300	vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning,	WECM	environment, planning, security
that includes the planning, design, and construction of a complex network that will sustain an attack, document events, and mitigate the effects of an attack. ITSY 2445 This is a practical application and comprehensive course that includes the planning, design, and construction of a complex network that will sustain an attack, document WECM events, planning events, planning	ITSY	1400	vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning,	WECM	environment, planning, security
that includes the planning, design, and construction of a complex network that will sustain an attack, document events, planning	ITSY	2345	that includes the planning, design, and construction of a complex network that will sustain an attack, document	WECM	events, planning
	ITSY	2445	that includes the planning, design, and construction of a complex network that will sustain an attack, document	WECM	events, planning





ITSY	2341	In-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan.	WECM	planning, security
ITSY	2441	In-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan.	WECM	planning, security
ITSY	1342	Instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses.	WECM	security
ITSY	1442	Instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses.	WECM	security
ITSY	2300	Safeguard computer operating systems by demonstrating server support skills and designing and implementing a security system. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security standards.	WECM	security
ITSY	2301	Identify elements of firewall design, types of security threats and responses to security attacks. Use Best Practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities.	WECM	security





ITSY	2330	Computer information systems security monitoring, intrusion detection, and crisis management. Includes alarm management, signature configuration, sensor configuration, and troubleshooting components. Emphasizes identifying, resolving, and documenting network crises and activating the response team.	WECM	security
ITSY	2342	In-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; and implementing and modifying security measures.	WECM	security
ITSY	2343	In-depth study of system forensics including methodologies used for analysis of computer security breaches. Gather and evaluate evidence to perform postmortem analysis of a security breach.	WECM	security
ITSY	2359	Capstone experience for the security curriculum. Synthesizes technical material covered in prior courses to monitor, audit, analyze, and revise computer and network security systems to ensure appropriate levels of protection are in place to assure regulatory compliance.	WECM	security
ITSY	2400	Safeguard computer operating systems by demonstrating server support skills and designing and implementing a security system. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security standards.	WECM	security
ITSY	2401	Identify elements of firewall design, types of security threats and responses to security attacks. Use best practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities.	WECM	security





ITSY	2430	Computer information systems security monitoring, intrusion detection, and crisis management. Includes alarm management, signature configuration, sensor configuration, and troubleshooting components. Emphasizes identifying, resolving, and documenting network crises and activating the response team.	WECM	security
ITSY	2442	In-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; and implementing and modifying security measures.	WECM	security
ITSY	2443	In-depth study of system forensics including methodologies used for analysis of computer security breaches. Gather and evaluate evidence to perform postmortem analysis of a security breach.	WECM	security
ITSY	2459	Capstone experience for the security curriculum. Synthesizes technical material covered in prior courses to monitor, audit, analyze, and revise computer and network security systems to ensure appropriate levels of protection are in place to assure regulatory compliance.	WECM	security
ITSY	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the information security technology or occupation and relevant to the professional development of the student.	WECM	technology, events, security
ITSY	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the information security technology or occupation and relevant to the professional development of the student.	WECM	technology, events, security





ITSY	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the information security technology or occupation and relevant to the professional development of the student.	WECM	technology, events, security
ITSY	1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the information security technology or occupation and relevant to the professional development of the student.	WECM	technology, events, security
ITSY	1282	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
ITSY	1382	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
JAPN	1411	This is the first semester of academic transfer Japanese. This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented.	ACGM	





JAPN	1412	This is the second semester of academic transfer Japanese. This course continues the oral practice, reading, writing, grammar and cultural studies begun in JAPN 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax.	ACGM	
JAPN	2311	This is the third semester of academic transfer Japanese. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded.	ACGM	
JAPN	2312	This is the fourth semester of academic transfer Japanese. This course is a continuation of JAPN 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture.	ACGM	
KINE	1306	This course covers the theory and practice in advanced first aid and emergency care. Various aspects of safety education also are included. The course content has been selected from nationally recognized organizations in safety education and first aid. This course does not satisfy the physical education activity course requirement.	ACGM	Education, emergency
KINE	1346	Study of the use and abuse of drugs in today's society. Emphasizes the physiological, sociological, and psychological factors.	ACGM	tobacco use
KINE	1301	This is a survey course in human movement that includes historical, philosophical, psychological and physiological components essential to the study of kinesiology. Students are introduced to the skills and knowledge required to become successful in the field of kinesiology.	ACGM	





KINE	1308	This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are football, basketball, and other sports as appropriate. Students are expected to officiate intramural games. This course does not satisfy the physical education activity course requirement.	ACGM	
KINE	1321	The skills and techniques of coaching are presented. Included are the history, theories, philosophies, rules, terminology, and finer points of the sport. Topics may include: coaching methods, motivational techniques, marketing, sport psychology, budgeting and fundraising.	ACGM	
KINE	1322	This course is designed to combine the knowledge from exercise science curriculum with practical application and emphasize technical training skills necessary for personal training and fitness coaching. Included are the history, theories, terminology and finer points of personal training and sports coaching.	ACGM	
KINE	1338	Introduces the concepts of physical fitness, nutrition, health promotion, disease prevention and stress management. This course is designed to present information which will assist the student in making intelligent choices that contribute to a healthy lifestyle. Concepts and use of selected physiological variables of fitness, individual testing and consultation, and the organization of sports and fitness programs.	ACGM	





KINE	2356	Prevention and care of athletic injuries with emphasis on qualities of a good athletic trainer, avoiding accidents and injuries, recognizing signs and symptoms of specific sports injuries and conditions, immediate and long-term care of injuries, and administration procedures in athletic training.	ACGM	
KORE	1411	This is the first semester of academic transfer Korean. This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented.	ACGM	
KORE	1412	This is the second semester of academic transfer Korean. This course continues the oral practice, reading, writing, grammar and cultural studies begun in KORE 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax.	ACGM	
KORE	2311	This is the third semester of academic transfer Korean. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded.	ACGM	
KORE	2312	This is the fourth semester of academic transfer Korean. This course is a continuation of KORE 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture.	ACGM	





LGLA	1311	Presents legal terminology relating to substantive areas of law and the federal and state judicial systems. Emphasizes the paralegal's role in the legal system.	WECM	democracy
LGLA	1323	Presents the fundamental concepts of employment law, including employment contracts, at-will employment, governmental regulations, and discrimination issues, emphasizing the paralegal's role in employment law.	WECM	employment, fundamental, discrimination
LGLA	1313	An overview of the paralegal profession including, professional regulation, trends and issues, ethical obligations, and the paralegal's role in the delivery of legal services.	WECM	ethical
LGLA	1355	Fundamental concepts of family law including formal and informal marriages, divorce, annulment, martial property, and the parent-child relationship with emphasis on the paralegal's role in family law.	WECM	family, marriage, fundamental
LGLA	1301	Presents the fundamentals of legal research and writing emphasizing the paralegal's role including resources and processes used in legal research and writing.	WECM	fundamental
LGLA	1343	Fundamental concepts of bankruptcy law and procedure are presented including individual and business liquidation and reorganization with emphasis on the paralegal's role.	WECM	fundamental
LGLA	1351	Presents fundamental concepts of contract law including formation, performance, and enforcement of contracts under the common law and the Uniform Commercial Code with emphasis on the paralegal's role in contract law.	WECM	fundamental





LGLA	1345	Presents fundamental concepts and procedures of civil litigation including pretrial, trial, and post-trial phases of litigation and emphasizes the paralegal's role in civil litigation.	WECM	fundamental, civil society, democratic societies
LGLA	1359	Presents fundamental concepts of immigration law including substantive and procedural law related to visa applications, deportation, naturalization, and citizenship emphasizing the paralegal's role in immigration law.	WECM	fundamental, migration
LGLA	1353	Fundamental concepts of the law of wills, trusts, and probate administration emphasizing the paralegal's role.	WECM	fundamental, transparent
LGLA	2303	Fundamental concepts of tort and personal injury law including intentional torts, negligence, and strict liability are presented with emphasis on the paralegal'srole in tort and personal injury law.	WECM	fundamental, intentional torts
LGLA	2315	Fundamental concepts of criminal law and procedure from arrest to final disposition including principles of federal and state law emphasizing the role of the paralegal in the criminal justice system.	WECM	Justice, fundamental
LGLA	2313	Fundamental concepts of criminal law and procedure from arrest to final disposition including principles of federal and state law emphasizing the role of the paralegal in the criminal justice system.	WECM	Justice, fundamental, unsentenced detainee
LGLA	2335	This course provides opportunities to implement advanced civil litigation techniques and builds upon skills acquired in prior civil litigation courses with emphasis on the paralegal'srole. Common law and statutory civil litigation concepts, ethical obligations of the paralegal assisting in civil litigation work, alternative dispute resolution processes, are reviewed.	WECM	opportunities, ethical, civil society, democratic societies





LGLA	2311	Basic concepts of business organizations including law of agency, sole proprietorships, partnerships, corporations, and other emerging business entities with emphasis on the paralegal's role.	WECM	partner, multi-stakeholder partnerships
LGLA	1300	Fundamental concepts of elder law, including financial and estate planning, public benefits, health care, personal planning and protection, and consumer protection emphasizing the paralegal's role in elder law.	WECM	planning, fundamental
LGLA	2309	Presents fundamental concepts of real property law including the nature of real property, rights and duties of ownership, land use, voluntary and involuntary conveyances, and the recording of and searching for real estate documents emphasizing the paralegal's role in real property law.	WECM	rights, fundamental, basic rights
LGLA	2323	Presents the fundamentals of intellectual property law including creation, procurement, preparation, and filing of documents related to patents, copyrights, trademarks, and the processes of intellectual property litigation. Emphasizes the paralegal's role in intellectual property law.	WECM	rights, fundamental, basic rights
LGLA	1317	Computer technology and software applications within the law office emphasizing the paralegal's role in the use of law office technology.	WECM	technology
LGLA	1380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





LGLA	2331	Builds on previous legal research and writing courses and covers standard and electronic research techniques and preparation of complex legal documents with emphasis on the paralegal's role.	WECM	
LGLA	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
LMGT	1370	Sustainable Logistics course develops students to measure and minimize the ecological impact of logistics activities. This includes all activities of the forward and reverse flows of products, information and services between the point of origin and the point of consumption. It is the aim to create a sustainable company value using a balance of economic and environmental efficiency.	WECM	ecological, economic, environment, resource efficiency, resource-use efficiency
LMGT	1345	A study of the basic economic principles and concepts applicable to transportation and distribution.	WECM	economic
LMGT	1325	Emphasis on physical distribution and total supply chain management. Includes warehouse operations management, hardware and software operations, bar codes, organizational effectiveness, just-in-time, and continuous replenishment.	WECM	effective
LMGT	1425	Emphasis on physical distribution and total supply chain management. Includes warehouse operations management, hardware and software operations, bar codes, organizational effectiveness, just-in-time manufacturing, continuous replenishment, and third party.	WECM	effective, resource efficiency, resource-use efficiency





LMGT	2334	A study of the role and functions of a transportation traffic manager within a commercial or public enterprise. Includes training in rate negotiation, carrier and mode selection, carrier service evaluation, quality control, traffic pattern analysis, documentation for domestic and international shipments, claims, hazardous materials movement, and the state, federal, and international environments of transportation.	WECM	environment, road traffic, toxic
LMGT	1301	Overview of the radio frequency identification (RFID) system and its utilization in the current logistical industry. Includes an introduction of the value of the RFID system as it relates to traffic management, transportation, inventory management, warehousing, packaging, order processing, and materials handling.	WECM	Housing
LMGT	2330	Identification of the principles and practices involved in international distribution systems including the multinational corporation. Attention to global strategic planning, production, supply, manpower/labor, geography, business communications, cultural, political, and legal issues affecting global distribution and firm/host relationships.	WECM	planning, resource efficiency, resource-use efficiency
LMGT	1449	A study of materials requirement planning that includes net change versus regenerative systems, lot sizing, and the time sharing of dependent demand.	WECM	planning, regeneration, regenerative capacity
LMGT	1393	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events





LMGT	1323	An overview of the principles and practices of transportation and its role in the distribution process. Emphasis on the physical transportation systems involved in the United States as well as on global distribution systems. Topics include carrier responsibilities and services, freight classifications, rates, tariffs, and public policy and regulations. Also includes logistical geography and the development of skills to solve logistical transportation problems and issues.	WECM	transportation system
LMGT	1319	A systems approach to managing activities associated with traffic, transportation, inventory management and control, warehousing, packaging, order processing, and materials handling.	WECM	
LMGT	1321	Introduces the concepts and principles of materials management to include inventory control and forecasting activities.	WECM	
LMGT	1340	Exploration of relevant and changing topics in the logistics management field. Includes group projects, interaction with local industry, class lectures, and case studies.	WECM	
LMGT	1341	An analysis of bill of lading contracts and liability for lost or damaged freight, including procedures for filing and documenting claims.	WECM	
LOTT	1401	An introductory course in fiber optics and its application including advantages of fiber, light transmission in fiber, types of fiber, sources, detectors, and connectors.	WECM	
MATH	1325	This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences. This course is not a substitute for MATH 2413, Calculus I.	ACGM	economic





MATH	1324	The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value.	ACGM	economic, microfinance
MATH	2318	Introduces and provides models for application of the concepts of vector algebra. Topics include finite dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvectors; and applications in science and engineering.	ACGM	Finite
MATH	2418	Introduces and provides models for application of the concepts of vector algebra. Topics include finite dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvectors; and applications in science and engineering.	ACGM	finite





MATH	2413	This course is a study of limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas.	ACGM	finite, fundamental
MATH	1350	This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the conceptual development of the following: sets, functions, numeration systems, number theory, and properties of the various number systems with an emphasis on problem solving and critical thinking.	ACGM	fundamental
MATH	1351	This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the concepts of geometry, measurement, probability, and statistics with an emphasis on problem solving and critical thinking.	ACGM	fundamental
MATH	2415	This course is a study of advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral including Green's Theorem, the Divergence Theorem, and Stokes' Theorem.	ACGM	Green





MATH	1332	Intended for Non STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered.	ACGM	technology
MATH	1342	This course is a study of collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended.	ACGM	technology
MATH	1442	Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended.	ACGM	technology
MATH	1314	This course is an in-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.	ACGM	
MATH	1316	In depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates, and parametric equations may be included.	ACGM	





MATH	1370	Course topics include review of limits, differentiation, logarithmic and exponential functions, integration, applications of integration, calculus of several variables, differential equations, sequences and series.	ACGM
MATH	1414	This course is an in-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.	ACGM
MATH	2305	A course designed to prepare math, computer science, and engineering majors for a background in abstraction, notation, and critical thinking for the mathematics most directly related to computer science. Topics include: logic, relations, functions, basic set theory, countability and counting arguments, proof techniques, mathematical induction, combinatorics, discrete probability, recursion, sequence and recurrence, elementary number theory, graph theory, and mathematical proof techniques.	ACGM
MATH	2320	This course is a study of ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems, and applications.	ACGM
MATH	2412	This course consists of the study of algebraic and trigonometric topics including polynomial, rational, exponential, logarithmic and trigonometric functions and their graphs. Conic sections, polar coordinates, and other topics of analytic geometry will be included.	ACGM





MATH	2414	This course is a study of differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals.	ACGM	
MATH	2420	This course is a study of ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems, and applications.	ACGM	
MCHN	1343	Designed to prepare the student with technical, applied mathematics that will be necessary in future machine shop-related courses.	WECM	future
MCHN	2445	Advanced milling, grinding, and lathe operations to close tolerance dimensions. Emphasis on job planning and advanced uses of precision measuring instruments.	WECM	planning
MCHN	2447	An advanced course in the designing and building of special tools, such as jigs, fixtures, punch press dies, and molds. Machining and assembling of a production tool using conventional machine shop equipment. Application of production tool theory, care, and maintenance.	WECM	resilient infrastructure
MCHN	1393	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
MCHN	1200	Fundamental machine shop safety, math, and measurement.	WECM	
MCHN	1300	Fundamental machine shop safety, math and measurement.	WECM	





MCHN	1301	Fundamental machine shop safety, math, measurement, and theory of saws and drill presses.	WECM
MCHN	1319	A basic study of various materials used in the manufacturing industry and the chemical, physical, and mechanical properties of various materials. Emphasis on manufacturing processes, including casting, forming and machining.	WECM
MCHN	1320	An introduction to the modern science of dimensional metrology. Emphasis on the identification, selection, and application of various types of precision instruments associated with the machining trade. Practice of basic layout and piece part measurements while using standard measuring tools.	WECM
MCHN	1326	A study of Computer-Aided Manufacturing (CAM) software which is used to develop applications for manufacturing. Emphasis on tool geometry, tool selection and the tool library.	WECM
MCHN	1338	A course that introduces the student to machining fundamentals. The student will use basic machine tools including the lathe, milling machine, drill press, power saw, and bench grinder. Machine terminology, theory, math, part layout, and bench work using common measuring tools is included. Emphasis is placed on shop safety, housekeeping, and preventative maintenance.	WECM
MCHN	1352	Operation of drilling machines, milling machines, lathes, and power saws. Select and use appropriate precision measuring tools.	WECM





MCHN	1438	A course that introduces the student to machining fundamentals. The student begins by using basic machine tools including the lathe, milling machine, drill press, power saw, and bench grinder. Machine terminology, theory, math, part layout, and bench work using common measuring tools is included. Emphasis is placed on shop safety, housekeeping, and preventative maintenance.	WECM
MCHN	1454	Development of job process plan to include operation of lathes, milling machines, drill press machines, and power saws. Set-up, layout, and tool maintenance is included. Emphasis on shop safety and preventative maintenance.	WECM
MCHN	2331	CNC operations with an emphasis on turning centers.	WECM
MCHN	2335	The study of advanced CNC operations with an emphasis on programming and operations of machining and turning centers.	WECM
MCHN	2338	A study of advanced techniques in Computer-Aided Manufacturing (CAM).	WECM
MCHN	2431	A study of CNC operations with an emphasis on turning centers.	WECM
MCHN	2434	A study of CNC operations with an emphasis on vertical machining centers.	WECM
MCHN	2435	Advanced CNC operation with an emphasis on programming and operations of machining and turning centers.	WECM
MCHN	2441	A study of advanced lathe and milling operations. Emphasis on advanced cutting operations of the lathe and milling machines, including the use of special tooling, bench assembly, and materials identification.	WECM





MDCA	1302	A study of anatomy and physiology with emphasis on human pathophysiology, including etiology, prognosis, medical treatment, signs, and symptoms of common diseases of all body systems.	WECM	bodily health, communicable diseases, malaria, tropical disease
MDCA	1443	Emphasizes accurate ICD-9 and CPT coding of office procedures for payment/ reimbursement by patient or third party and prevention of insurance fraud. Additional topics may include managed care or medical economics.	WECM	economic, pay
MDCA	2361	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable, occupational theory
MDCA	1205	Instruction in principles, procedures, and regulations involving legal and ethical relationships among physicians, patients, and medical assistants in ambulatory care settings. Includes current ethical issues and risk management as they relate to the practice of medicine and fiduciary responsibilities. Special emphasis is place on culture, diversity, trends and career explorations.	WECM	Medicine, ethical
MDCA	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
MDCA	1154	Medical Assisting Credentialing Exam Review.	WECM	
MDCA	1213	A study and practical application of a medical vocabulary system. Includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots, and combining forms.	WECM	





MDCA	1313	A study and practical application of a medical vocabulary system. Includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots, and combining forms.	WECM
MDCA	1352	Procedures depicted in the Current Clinical Laboratory Improvement Act (CLIA). Includes blood collection, specimen handling, basic urinalysis, identification of normal ranges, quality assurance, and quality control. May include electrocardiography.	WECM
MDCA	1409	Emphasis on normal human anatomy and physiology of cells, tissues, organs, and systems with overview of common pathophysiology.	WECM
MDCA	1417	Emphasis on patient assessment, examination, and treatment as directed by physician. Includes vital signs, collection and documentation of patient information, asepsis, office clinical procedures, and other treatments as appropriate for the medical office.	WECM
MDCA	1421	A course in medical office procedures which may include appointment scheduling, medical records creation and maintenance, phone communications, transcriptions, coding, billing, collecting, third party reimbursement, credit arrangements, and use of computer in the medical office.	WECM





MFGT	1302	This course is an overview of automated manufacturing principles. It includes coverage of manufacturing process, control systems, and measurement theory. Students will identify terminology and fundamental concepts of manufacturing; describe the trends of manufacturing careers within the industry cluster; identify safety, health, environmental, and ergonomic issues in manufacturing; discuss quality and continuous improvement methods; describe the importance of maintenance within manufacturing; and identify processes and production steps in manufacturing.	WECM	environment
MFGT	1491	This is a course in programmable logic controllers as used in industrial environments including intermediate concepts, programming, applications, troubleshooting of ladder logic, and interfacing of equipment. The students will demonstrate an understanding of terminology; select hardware components; predict PLC operation based on ladder logic diagrams; program a PLC to perform various control functions.	WECM	environment
MFGT	1404	This course is an introduction to electrical and electronic principles utilized in automated manufacturing processes. Students will describe microcontroller applications in manufacturing; identify electrical/electronic components, circuits, and schematics/diagrams used in manufacturing; describe operations and applications of sensors and actuators used in manufacturing; apply interfacing techniques used in manufacturing; and apply programming techniques used with microcontrollers.	WECM	





MFGT	1406	This course is an overview of mechanical principles used in automated manufacturing. Topics covered include common measurement methods, engineering drawings, and mechanical methods used in automated manufacturing. Students will apply measurement techniques used in manufacturing; interpret engineering drawings used in product data management; identify mechanical systems and equipment used in advanced manufacturing; identify safety issues in manufacturing; describe hand tools and maintenance issues of manufacturing; demonstrate material assembly; and describe operations and applications of pneumatic, electro-pneumatic, hydraulic, and electro-hydraulic controls.	WECM	
MFGT	2459	Advanced topics in automated manufacturing. Includes electrical and electronic principles, electro-pneumatic and electro-hydraulic controls, logic control methods, and basic programming techniques.	WECM	
MLAB	1415	The study of blood cells in normal and abnormal conditions. Instruction in the theory and practical application of hematology procedures, including quality control, quality assurance, safety, manual and/or automated methods as well as blood cell maturation sequences, and normal and abnormal morphology with associated diseases.	WECM	communicable diseases, malaria, tropical disease





MLAB	2431	A study of blood antigens and antibodies. Presents quality control, basic laboratory technique and safety. Includes the principles, procedures and clinical significance of test results in genetics, blood group systems, pre-transfusion testing, adverse effects of transfusions, donor selection and components, and hemolytic disease of the newborn.	WECM	Genetic, tropical disease, tuberculosis
MLAB	1167	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	technology
MLAB	1211	An introduction to the study of urine and body fluid analysis. Includes the anatomy and physiology of the kidney, physical, chemical, and microscopic examination of urine, cerebrospinal fluid, and other body fluids as well as quality control, quality assurance, and safety.	WECM	
MLAB	1227	A course in coagulation theory, procedures, and practical applications. Includes quality control, quality assurance, safety and laboratory procedures which rely on commonly performed manual and/or semi-automated methods.	WECM	
MLAB	1335	An introduction to the theory and application of basic immunology, including the immune response, principles of antigen-antibody reactions, and the principles of serological procedures as well as quality control, quality assurance, and safety.	WECM	
MLAB	2266	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
MLAB	2267	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	





MLAB	2401	An introduction to the principles, procedures, physiological basis, and significance of testing performed in Clinical Chemistry. Includes quality control, reference values, and safety.	WECM	
MLAB	2534	Introduction in the theory, practical application, and pathogenesis of clinical microbiology, including collection, quality control, quality assurance, safety, setup, identification, susceptibility testing, and reporting results.	WECM	
MRIT	2460	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
MRIT	2560	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
MRIT	2563	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
MRIT	2660	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
MRIT	2661	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinical professional.	WECM	enable





MRIT	2160	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable, occupational theory
MRIT	2262	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable, occupational theory
MRIT	2334	This course is a continuation of MRIT 2330 and provides the advanced principles of Magnetic Resonance Imaging to prepare students to enter the field of MRI Technology.	WECM	technology
MRIT	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.	WECM	technology, events





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MRIT	2330	Magnetic resonance imaging. Focuses on the underlying scientific theory and practice leading to magnetic resonance imaging. Includes the concepts and scientific principles employed in magnetic resonance imaging techniques. Emphasis on principles of magnetism and interactions of living matter within magnetic fields. Learning Outcomes: Explain the safety hazards and the control of ferromagnetic materials near a magnetic resonance imager; describe the basic construction of magnetic resonance imaging devices; and relate various radiofrequency pulse sequences to their use in diagnostic imaging. Analyze the effect of a change in spin density, relaxation time, and phase coherence; and compare and contrast various radiofrequency pulse sequences used in magnetic resonance imaging.	WECM	toxic, unintentional poisoning
MRIT	1270	This course introduces the basic principles of Magnetic Resonance (MR) safety and the basic concepts of patient management. Educating patients and ancillary staff on magnet safety also is presented.	WECM	
MRIT	2265	Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student.	WECM	
MRIT	2268	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
MRIT	2374	Operation of magnetic resonance imaging equipment. Focuses on routine protocols, image quality, and quality control of magnetic resonance imaging. Includes theory and application of magnetic resonance imaging equipment and the principles of patient imaging techniques utilizing the equipment.	WECM	





MRKG	1311	Introduction to the marketing mix functions and process. Includes identification of consumer and organizational needs and explanation of environmental issues.	WECM	environment
MRKG	2348	Designed to enhance student understanding of the marketing environment and the dynamic interrelationships of the functions of marketing price, channels of distribution, promotion, and product responsibility. Provides a simulated marketing environment for experience in marketing decision-making and provides practical experiences in analyzing market cases for the students.	WECM	environment, responsibility, responsible
MRKG	1302	Introduction to the retailing environment, types of retailers, current trends, the employment of retailing techniques, and factors that influence retailing.	WECM	environment, employment
MRKG	2333	Overview of the selling process. Identification of the elements of the communication process between buyers and sellers. Examination of the legal and ethical issues of organizations which affect salespeople.	WECM	ethical
MRKG	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
MRKG	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
MRKG	1301	General principles of customer service including skills, knowledge, attitudes, and behaviors.	WECM	
MRKG	1366	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	





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MRKG	1371	Overview of the various techniques and strategies used in meeting the wants and needs of consumers in the sports industry as well as understanding how sports can be used to assist in the marketing of other companies and products. Recognize the uniqueness of sports marketing compared to traditional marketing approach. Analyze market segmentation of the sports industry, the importance of market research, and the identification of customers using database marketing and appropriately applying the marketing mix to develop various materials including sponsorship and endorsement packages.	WECM	
MRKG	1381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
MRKG	2312	Explore electronic tools utilized in marketing; focus on marketing communications in developing customer relationships.	WECM	
MRKG	2349	Integrated marketing communications. Includes advertising principles and practices. Emphasizes multi-media of persuasive communication including buyer behavior, budgeting, and regulatory constraints.	WECM	
MRKG	2366	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
MRKG	2371	A study of current trends in social media followed by the development of a plan and implementation of social media marketing activities and evaluation of data using online analytics.	WECM	





MRKG	2381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
MRMT	1192	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
MRMT	1292	Application of learned transcription fundamentals and utilization of references in the production of intermediate level reports of physician dictation with development of speed and accuracy.	WECM	
MRMT	1307	Fundamentals of medical transcription with hands-on experience in transcribing physician dictation including basic reports such as history and physicals, discharge summaries, consultations, operative reports, and other medical reports. Utilizes transcribing and information processing equipment compatible with industry standards. Designed to develop speed and accuracy.	WECM	
MRMT	1382	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





MRMT	1407	Fundamentals of medical transcription with hands-on experience in transcribing physician dictation including basic reports such as history and physicals, discharge summaries, consultations, operative reports, and other medical reports. Utilizes transcribing and information processing equipment compatible with industry standards. Designed to develop speed and accuracy.	WECM	
MRMT	2433	Production of advanced reports of physician dictation with increasing speed and accuracy including history and physicals, consultations, discharge summaries, operative reports, and other medical reports.	WECM	
MSST	1302	Designed to introduce students to the U.S. legal system as it applies to credentialing and peer review aspects of the health care delivery system and Medical Staff Services including legal terminology, statutes, ethical decisions, liability and negligence in credentialing and peer review activities.	WECM	ethical
MSST	2331	An advanced course building on bylaws and methods to research and review applications and credentials to determine privileging, establish a peer review process, and investigate problem areas.	WECM	rule of law





MSST	1341	Focuses on performance improvement and quality management in health care. Theories fundamental to Total Quality Management (TQM) and Continuous Quality Improvement (CQI) are explored and applied to the health care setting. Evolution of efforts to measure quality in healthcare organizations and attitudes of physicians concerning these efforts are examined. Statistical tools and use of CQI teams are described. The Joint Commission on Accreditation of Hospital Organizations (JCAHO) Performance Improvement Standards are covered, with emphasis on expectations of the medical staff organization. The description of a hospital risk management program and National Committee for Quality Assurance (NCQA) required monitors are also reviewed.	WECM	universal health coverage
MSST	1301	The medical staff office in a health care organization. Includes the role of the office, organization of health care facilities, credentialing of medical staff and allied health practitioners, staff appointments, privileged delineation, monitoring and documenting, proctoring, peer review, medical management, and preparing agendas and minutes.	WECM	
MSST	1340	A continuation of MSST 1301, Medical Staff Services I. Includes the process of meeting standards of the Joint Commission on the Accreditation of Health Care Organizations (JCAHO), National Committee for Quality Assurance (NCQA), state licensure laws, and other regulatory requirements.	WECM	





MSST	1380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
MTRC	1422	Theory of operation and test procedures and equipment used in the diagnosis and repair of different circuits which make up a motorcycle electrical system.	WECM	Air
MTRC	1402	Tune up procedures for motorcycles including analysis, valve train, ignition, fuel system, and chassis service. Emphasis on the appropriate procedures and equipment.	WECM	clean fuels
MTRC	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
MTRC	1266	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
MTRC	1380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
MTRC	1405	Principles of operation of two and four stroke motorcycle engines and their associated systems. Emphasis on troubleshooting and analysis of faulty systems and their individual components.	WECM	





MTRC	1408	Theory of operation, servicing procedures and problem diagnosis of motorcycle chassis, final drive systems, wheels, brakes, frames, and suspensions with emphasis on troubleshooting for handling and rideability problems.	WECM	
MTRC	1419	Overhaul procedures for four stroke motorcycle engines and transmissions. Emphasis on proper shop procedures for servicing the piston, cylinder, valve train, crankshaft assembly, and transmission during the course of an overhaul.	WECM	
MTRC	1420	Theory of operation, troubleshooting, overhaul and service of drive systems found on motorcycles and all-terrain vehicles with emphasis on proper shop procedures.	WECM	
MTRC	1470	Theory of operation, troubleshooting, overhaul and service of drive systems found on motorcycles and all-terrain vehicles with emphasis on proper shop procedures.	WECM	
MUAP	1181	These courses are open to students enrolled in music theory, ensembles, and other music major and minor courses. They provide private instruction in the student's secondary area and consist of a one-half hour lesson a week. Private music may be repeated for credit.	WECM	
MUAP	2281	These courses are open to students enrolled in music theory, ensembles, or other music major and minor courses. They provide private instruction in the area of the student's concentration and consist of one hour of instruction per week. Private music may be repeated for credit.	WECM	





2381	These courses are primarily for music performance majors and are open to students enrolled in music theory, ensembles, or other music major and minor courses. They provide private instruction in the area of the student's major instrument and consist of one hour of instruction per week. These courses may be repeated for credit.	WECM
1121	The band studies and performs a wide variety of music in all areas of band literature.	ACGM
1122	The jazz ensemble rehearses and performs a variety of jazz styles.	ACGM
1123	The band studies and performs a wide variety of music in all areas of band literature.	ACGM
1131	A group of keyboard instrumentalists read and perform literature for small ensembles.	ACGM
1132	A group of woodwind instrumentalists read and perform literature for small ensembles.	ACGM
1133	A group of brass instrumentalists read and perform literature for small ensembles.	ACGM
1134	Music composed and arranged for a guitar ensemble is performed. Works for a guitar and a different instrument or for guitar and a voice are also included.	ACGM
1135	A group of percussion instrumentalists read and perform literature for small ensembles.	ACGM
1136	A group of string instrumentalists read and perform literature for small ensembles.	ACGM
1137	In the symphonic wind ensemble, students study and perform stylistic literature of all periods.	ACGM
1151	Activities include study and performance of specialized choral literature suitable for more advanced students.	ACGM
	1121 1122 1123 1131 1132 1133 1134 1135 1136	and are open to students enrolled in music theory, ensembles, or other music major and minor courses. They provide private instruction in the area of the student's major instrument and consist of one hour of instruction per week. These courses may be repeated for credit. 1121 The band studies and performs a wide variety of music in all areas of band literature. 1122 The jazz ensemble rehearses and performs a variety of jazz styles. 1123 The band studies and performs a wide variety of music in all areas of band literature. 1131 A group of keyboard instrumentalists read and perform literature for small ensembles. 1132 A group of woodwind instrumentalists read and perform literature for small ensembles. 1133 A group of brass instrumentalists read and perform literature for small ensembles. 1134 Music composed and arranged for a guitar ensemble is performed. Works for a guitar and a different instrument or for guitar and a voice are also included. 1135 A group of percussion instrumentalists read and perform literature for small ensembles. 1136 A group of string instrumentalists read and perform literature for small ensembles. 1137 In the symphonic wind ensemble, students study and perform stylistic literature of all periods. 1151 Activities include study and performance of specialized





MUEN	1152	A group of chamber instrumentalists or vocalists read and perform literature for small ensembles.	ACGM	
MUEN	1153	A group of vocalists read and perform literature for small ensembles. Membership is by audition with the appropriate director.	ACGM	
MUEN	2123	Students study and perform various forms of commercial music, such as jazz, pop, avant-garde, and fusion. Student arranging, composing, and conducting are encouraged.	ACGM	
MUEN	2141	A wide variety of music representing the literature of the great eras of music history is studied and performed.	ACGM	
MUSB	1380	Career related activities encountered in the students' area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	cooperation
MUSB	1305	An overview of the music industry including songwriting, live performances, the record industry, music merchandising, contracts and licenses, and career opportunities.	WECM	opportunities
MUSB	1381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





MUSC	2186	A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.	WECM	enable
MUSC	1331	Exploration of the history and evolution of Musical Instrument Digital Interface (MIDI) systems and applications. Includes the MIDI language and applications in the studio environment using software-based sequencing programs.	WECM	environment
MUSC	2448	Advanced recording, mixing, arranging, and editing. Includes the role of the producer in session planning, communication, budgeting, business aspects, technical considerations, and music markets.	WECM	planning, producer
MUSC	1303	A study of commercial music industry trends and developments through historical analysis. Topics include the evolution of the music industry with emphasis on the development of popular musical styles and the impact of culture and technology on industry growth.	WECM	technology
MUSC	1193	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
MUSC	1327	Overview of the recording studio. Includes basic studio electronics and acoustic principles, waveform properties, microphone concepts and placement techniques, studio set up and signal flow, console theory, signal processing concepts, multi-track principles and operation, and an overview of mixing and editing.	WECM	





MUSC	1333	Introduction to the use of Digital Audio Workstations (DAWs), computers, synthesis, multi-track recording and other MIDI (Music Instrument Digital Interface) devices in the production, arrangement, composition and performance of music.	WECM
MUSC	2141	Stylistic analysis of commercial music performances presented by students, faculty, and guest artists.	WECM
MUSC	2314	A study of the chordal structures of jazz, rock, country, and fusion with emphasis on extemporaneous performance.	WECM
MUSC	2319	Exploration of writing for voices and instruments to include ranges, transposition, and idiosyncrasies of each instrument with emphasis on commercial music chord voicings.	WECM
MUSC	2330	Presentation of arranging and composition for projects in industry recognized genres including songwriting, show writing and studio orchestra.	WECM
MUSC	2345	Advanced sound synthesis. Includes hybrid synthesis and digital sampling.	WECM
MUSC	2355	A continuation of MIDI I with emphasis on advanced sequencer operation, and SMPTE-based synchronization in the interaction of multiple recording and playback systems.	WECM
MUSC	2427	Implementation of the recording process, microphones, audio console, multi-track recorder, and signal processing devices.	WECM
MUSC	2447	Advanced practice of procedures and techniques and manipulating audio. Includes digital audio editing, advanced recording techniques, and advanced engineering projects.	WECM





MUSI	1301	Introduction to the basic elements of music theory for non-music majors: scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter, and rhythm.	ACGM	Harmony
MUSI	1304	Study of the fundamentals of music for prospective classroom teachers with an introduction to melodic, rhythmic, and harmonic elements. Emphasis on participation in singing and reading music.	ACGM	Participation, direct participation, meaningful participation
MUSI	1310	The study of social and musical influences on Jazz/Rock music and the influence of Jazz/Rock Music on society and the music industry.	ACGM	social
MUSI	1116	Keyboard skills and aural skills (including sight-singing and ear training) are developed. It is recommended that students enrolled in MUSI 1311 enroll in this course.	ACGM	
MUSI	1117	This course is a continuation of MUSI 1116. It is recommended that students enrolled in Music 1312 enroll in this course.	ACGM	
MUSI	1160	The phonetic sounds of the Italian language are studied. Included is selected vocabulary. This course is primarily for voice majors.	ACGM	
MUSI	1161	The phonetic sounds of the English language are studied. Included is selected vocabulary. This course is primarily for voice majors.	ACGM	
MUSI	1181	This course is primarily for students with no piano background. It develops basic musicianship and piano skills.	ACGM	
MUSI	1182	The study of piano is continued. Included are technique, harmonization, transposition, improvisation, accompanying, sight reading, and performing various styles of repertoire.	ACGM	





MUSI	1183	This course is for non-voice majors. It presents the principles of breathing, voice production, tone control, enunciation, and phrasing in two group lessons a week.	ACGM	
MUSI	1192	An introductory course in acoustic guitar playing based on acoustic and classical guitar technique. Music reading of melodic, harmonic, and rhythmic exercises are learned to gain initial mastery of the fundamental techniques of guitar playing. Introductory elements about the history and culture of the guitar are included in this course.	ACGM	
MUSI	1306	The basic elements of music are surveyed and examined in the music literature of western civilization, particularly from the Baroque Period to the present. Cultural influences on the music of each era are observed.	ACGM	
MUSI	1308	The music of recognized composers in the major periods of music history is examined. Topics include the characteristics of sound, elements of music, performance media, and musical texture. Emphasis is on the music of the late Gothic, Renaissance, and Baroque eras.	ACGM	
MUSI	1309	This course is a continuation of MUSI 1308. The compositional procedures and forms used by composers are studied. Emphasis is on the Classical, Romantic, and Modern periods.	ACGM	
MUSI	1311	This course is designed for music majors and minors. Emphasis is on notation, cadences, classification of diatonic triads, scales, and modes. It is recommended that students enrolled in Music 1116 enroll in this course.	ACGM	





MUSI	1312	This course focuses on part-writing and harmonization with triads and their inversions. Also included is a chord vocabulary expanded to include materials from the common practice period as well as contemporary periods. It is recommended that students enrolled in Music 1117 enroll in this course.	ACGM
MUSI	2116	Keyboard and aural skills (including sight-singing and ear training) are developed. It is recommended that students enrolled in MUSI 2311 enroll in this course.	ACGM
MUSI	2117	This course is a continuation of MUSI 2116. It is recommended that students enrolled in MUSI 2312 enroll in this course.	ACGM
MUSI	2160	The phonetic sounds of the German language are studied. Included is selected vocabulary. This course is primarily for voice majors.	ACGM
MUSI	2161	The phonetic sounds of the French language are studied. Included is selected vocabulary. This course is primarily for voice majors.	ACGM
MUSI	2181	This course is a continuation of functional keyboard skills, including harmonization, sight-reading, accompanying styles, improvisation, and technical exercises. It is designed for the music major preparing for the piano proficiency exam, but is also open to any interested student. It is recommended that music majors also study privately.	ACGM





MUSI	2182	This course is a continuation of functional keyboard skills in Music 2181 with greater emphasis on advanced harmonization and appropriate technical skills. It is designed as a preparation for the piano proficiency exam for the music major, but is also open to any interested student. It is recommended that music majors also study privately.	ACGM	
MUSI	2311	This course is a continuation of the study of music theory. It includes the materials of modulation, larger forms, and thematic development, and more advanced analysis. It is recommended that students enrolled in Music 2116 enroll in this course.	ACGM	
MUSI	2312	This course is a continuation of the topics developed in Music 2311. The preceding materials are expanded to include melody, harmony, tonality, and the formal processes of 20th century music. It is recommended that students enrolled in Music 2117 enroll in this course.	ACGM	
MUSI	9176	This is an on-campus concert/seminar series designed to provide a laboratory and listening experience as an extension of classroom music studies. Concerts, seminars and workshops are presented by guest artists and lecturers, faculty members and students. This is a one-hour credit course and may be repeated for credit.	WECM	
MUSP	1242	Participation in a small commercial music ensemble concentrating on commercial music performance styles.	WECM	Participation, direct participation, meaningful participation
MUSP	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events





MUSP	1380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
NDTE	2411	Fundamentals of welding and inspection, code interpretation, and the practical portion in preparation for the certified welding inspector examination.	WECM	
NUPC	1191	This Patient Care Technician Review follows the NHA Detailed Certified Patient Care Technician Test Plan and provides a review of material related to Patient Care Technician. The course includes the use of Practice Exams that simulate an actual certification examination experience, as well as the use of CPCT study guides and hands on lab skills practice. Successful completers of this Capstone course will be prepared to challenge the National Healthcare Association (NHA) Certified Patient Care Technician/Assistant exam (CPCT/A).	WECM	association
NUPC	1320	A course designed to provide the student with the necessary training, skills, and knowledge needed to gain employment as a Patient Care Technician in a hospital setting. A national certification test is offered upon successful completion of the course.	WECM	employment
NURA	1291	Instruction in first aid for the injured or ill persons. Includes lifesaving skills for respiratory and cardiac emergencies involving adults, children, and infants in a medical setting. During this course students will be awarded the American Heart Association Healthcare Provider Course Completion card.	WECM	association, universal access, universal health coverage





NURA	1301	Preparation for entry level nursing assistants to achieve a level of knowledge, skills, and abilities essential to provide basic care to residents of long-term care facilities. Topics include resident's rights, communication, safety, observation, reporting and assisting residents in maintaining basic comfort and safety. Emphasis on effective interaction with members of the health care team.	WECM	effective, rights, basic rights
NURA	1160	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
NURA	1161	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
NURA	1260	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
NURA	1307	A basic study of the structures and functions of the human body.	WECM	
OSHT	1307	Introduction to safety requirements for construction sites including occupational health and environmental controls.	WECM	environment
OSHT	1313	Provides a basis for understanding the nature of occupational hazard recognition, accident prevention, loss reduction, inspection techniques, and accident investigation analysis.	WECM	loss, toxic
OTHA	2301	Genetic, tropical disease, tuberculosis	WECM	communicable diseases, tuberculosis





ОТНА	1161	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
ОТНА	1162	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
ОТНА	1163	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
ОТНА	1305	Introduction to occupational therapy including the historical development and philosophy. Emphasis on the roles of the occupational therapy assistant. Topics include occupation; occupational therapy personnel; current health care environment; and moral, legal, and ethical issues.	WECM	environment, ethical, moral and spiritual education
ОТНА	2235	Explores the roles of the occupational therapy assistant in health care delivery. Topics include documentation, reimbursement, credentialing, ethical standards, health care team role delineation, and management.	WECM	ethical
ОТНА	1253	Occupational performance of elders. Includes frames of reference, evaluation tools and techniques, and intervention strategies. Identify components of health and wellness and function; develop adaptations for age appropriate occupations; identify the client factors that affect occupational performance; demonstrate skills in the evaluation process; and select intervention strategies to facilitate occupational performance.	WECM	





OTHA	1315	Various occupations or activities used as therapeutic interventions in occupational therapy. Emphasis on awareness of activity demands, contexts, adapting, grading, and safe implementation of occupations or activities.	WECM	
ОТНА	1319	Concepts, techniques, and assessments leading to proficiency in skills and activities used as treatment interventions in occupational therapy (OT). Emphasizes the occupational therapy assistant's role in the OT process.	WECM	
ОТНА	1341	Occupational performance of newborns through adolescents. Includes frames of reference, evaluation tools and techniques, and intervention strategies.	WECM	
OTHA	1349	Occupational performance of adults. Includes frames of reference, evaluation tools and techniques, and intervention strategies.	WECM	
OTHA	2209	Promotion of mental health and wellness through occupational therapy. Topics include theory and intervention strategies to enhance occupational performance.	WECM	
ОТНА	2266	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
ОТНА	2267	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
ОТНА	2302	Emphasis on advanced techniques and applications used in traditional and non-traditional practice settings.	WECM	
OTHA	2305	Emphasis on current rehabilitative interventions.	WECM	





2331	Physical function to promote occupational performance. Includes frames of reference, evaluative tools, intervention strategies, and consumer education.	WECM	
2331	Examination of revenue-producing activities and sources of funds, construction and implementation of budgets, and basic terminology, concepts, and mechanics as they relate to fiscal factors. Topics include budget cycle, taxation, bonds, indebtedness, and fund accounting.	WECM	debt relief, debt restructuring
1247	Principles, practices, and regulations of backflow. Includes backpressure, public health, laws and responsibilities, mechanics and use of backflow devices, and equipment testing used in backflow devices and equipment testing used in backflow devices.	WECM	rule of law
1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Required.	WECM	technology, events
2235	Control system design and equipment use in commercial and industrial control systems. Includes air handling units variable air volume boxes, chillers, absorption systems, cooling towers, water treatment, and chilled water systems.	WECM	Water, desalination
1371	This course teaches methods used in the installation of controls, water heating systems, circulating water systems, and other piping systems commonly found in commercial buildings.	WECM	Water, desalination, drinking water
2336	Practices and procedures employed by a plumber in the common construction of a commercial building including drain, waste, and vent systems, water systems, and fixture installations.	WECM	Water, waste, desalination
	2331 1247 1291 2235	Includes frames of reference, evaluative tools, intervention strategies, and consumer education. Examination of revenue-producing activities and sources of funds, construction and implementation of budgets, and basic terminology, concepts, and mechanics as they relate to fiscal factors. Topics include budget cycle, taxation, bonds, indebtedness, and fund accounting. Principles, practices, and regulations of backflow. Includes backpressure, public health, laws and responsibilities, mechanics and use of backflow devices, and equipment testing used in backflow devices and equipment testing used in backflow devices and equipment to the technology or occupation and relevant to the professional development of the student. Required. Control system design and equipment use in commercial and industrial control systems. Includes air handling units variable air volume boxes, chillers, absorption systems, cooling towers, water treatment, and chilled water systems. This course teaches methods used in the installation of controls, water heating systems, circulating water systems, and other piping systems commonly found in commercial buildings. Practices and procedures employed by a plumber in the common construction of a commercial building including drain, waste, and vent systems, water systems, and fixture	Includes frames of reference, evaluative tools, intervention strategies, and consumer education. Examination of revenue-producing activities and sources of funds, construction and implementation of budgets, and basic terminology, concepts, and mechanics as they relate to fiscal factors. Topics include budget cycle, taxation, bonds, indebtedness, and fund accounting. Principles, practices, and regulations of backflow. Includes backpressure, public health, laws and responsibilities, mechanics and use of backflow devices, and equipment testing used in backflow devices and equipment testing used in backflow devices and equipment to the technology or occupation and relevant to the professional development of the student. Required. Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Required. Control system design and equipment use in commercial and industrial control systems. Includes air handling units variable air volume boxes, chillers, absorption systems, cooling towers, water treatment, and chilled water systems. This course teaches methods used in the installation of controls, water heating systems, circulating water systems, and other piping systems commonly found in commercial buildings. Practices and procedures employed by a plumber in the common construction of a commercial building including drain, waste, and vent systems, water systems, and fixture





PFPB	1370	This course teaches the skills, procedures, and techniques used in the installation of hot and cold potable water supply systems and drain, waste, and vent (DWV) systems in commercial buildings.	WECM	Water, waste, desalination, drinking water, potable water
PFPB	2357	State and local plumbing codes and the application of potable water, waste water, and gas systems relating to residential and light commercial settings.	WECM	Water, waste, desalination, drinking water, potable water
PFPB	1277	An introduction to the safety, techniques and practice in the use of oxy-fuel and shielded metal arc welding equipment.	WECM	
PFPB	1308	Mathematical operations necessary to calculate laying lengths of pipe fittings for fabrication. Identification and use of hand tools and power tools. Identification of pipe, pipe fittings, flanges, and fasteners used in the trade.	WECM	
PFPB	1323	An introductory study of state and local plumbing codes and their application in residential and light commercial settings. Required.	WECM	
PFPB	1350	Safe use of hand tools, power tools, rigging, and power equipment used in the plumbing trade for installation of different plumbing systems.	WECM	
PFPB	1373	This course teaches plumbing trade material selection, mathematical calculations applicable to the plumbing trade, hand and power tools, and safety practices.	WECM	
PFPB	2307	Pipe fabrication of various materials and installation of pipe supports.	WECM	
PFPB	2309	Skill development in the procedures and techniques employed by a plumber in the rough-in and top-out stages of a new home or the remodeling of an older home.	WECM	





PFPB	2341	Advanced pipe fabrication of various materials with emphasis on vertical, horizontal, and rolling off-sets using 45-degree fittings and odd-angle fittings.	WECM	
PFPB	2343	Identification, installation, and testing of steam traps and steam trap station components; valve identification, application, and maintenance; identification, storage, and handling of in-line specialties; hydrostatic testing of process piping.	WECM	
PHED	1116	This course focuses on understanding exercise and its effect on the body. Cardiovascular endurance, muscular strength, endurance and flexibility are improved through a variety of conditioning activities.	ACGM	bodily health
PHED	1118	This beginning course is designed to emphasize basic dance technique, body alignment and placement, floor work, locomotor patterns, and creative movement.	ACGM	bodily health
PHED	1127	This course includes an individualized program of walking, running, cycling, swimming, and weight training. From these activities, the student and instructor will design a fitness program to improve total body fitness, strength, endurance and self-image.	ACGM	bodily health
PHED	1164	Students are introduced to wellness related concepts and activities for the purpose of gaining knowledge and skills necessary to evaluate personal fitness level and to develop a personal lifelong fitness program. Activities include, but are not limited to: aerobics, circuit training, muscular development, flexibility, agility exercises, weight training and body composition.	ACGM	bodily health





PHED	2128	This class emphasizes the intermediate topic of Pilates focusing on the core postural muscles which help keep the body balanced and which are essential to providing support for the spine. Pilates course exercises will teach awareness of breath and alignment of the spine, and aim to strengthen the deep torso muscles.	ACGM	bodily health
PHED	2103	Course focuses on the core postural muscles which help keep the body balanced and which are essential to providing support for the spine. In particular, Pilates course exercises will teach awareness of breath and alignment of the spine, and aim to strengthen the deep torso muscles.	ACGM	bodily health, strengthen
PHED	1304	Emphasis is placed on relating course content to lifestyle to foster a better understanding of the major health issues of today. Current issues include, but are not limited to: emotional health, chemical use and abuse, human sexuality, major diseases, physical fitness, nutrition, aging, death and dying. This course does not satisfy the physical education activity course requirement.	ACGM	communicable diseases, health, lifestyle, malnutrition
PHED	1147	Basic skills and techniques are refined beyond the beginner level. Analysis and practice of the forearm pass, setting, spiking, serving, team play, strategies, and competitive play are covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Equipment is furnished.	ACGM	direct participation





PHED	1113	Beginning level skills in both men's and women's all-around gymnastic events are emphasized. Men's events include horizontal bar, pommel horse, rings, vaulting, floor exercise, and parallel bars. Women's events include floor exercise, vaulting, balance beam, and uneven parallel bars. Basic tumbling skills are also included. All appropriate events will be incorporated into a beginner's level routine.	ACGM	events
PHED	1139	Basic tumbling and the all-around events for men and women will be emphasized at the intermediate performance level. Course emphasis is placed on the development, preparation and presentation of gymnastic routines.	ACGM	events
PHED	1112	Participation, direct participation, meaningful participation, meaningful participation	ACGM	Participation, direct participation
PHED	1146	Basic skills and techniques are refined beyond the beginner level. Analysis and practice of shooting, passing, dribbling, team play, strategies, and competitive play covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Equipment is furnished.	ACGM	Participation, direct participation
PHED	1148	Basic skills and techniques are refined beyond the beginner level. Analysis and practice of hitting, fielding, pitching, team play, and competitive play are emphasized. Baseball history and interpretation of the rules are also covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Equipment is furnished.	ACGM	Participation, direct participation





PHED	2140	Introduction to the rules, scoring and fundamental techniques in the following sports: tennis, badminton and racquetball. Participation will help develop muscular and cardiovascular fitness and hand-eye coordination.	ACGM	Participation, direct participation
PHED	1131	Basic skills and techniques are refined beyond the beginner level. Analysis and practice of strategies, safety, offensive and defensive patterns of play and competitive activities are covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team.	ACGM	Participation, direct participation, meaningful participation
PHED	1165	Study of the use and abuse of drugs in today's society. Emphasizes the physiological, sociological, and psychological factors.	ACGM	tobacco use
PHED	1114	This course is designed to teach a non-swimmer or a shallow water swimmer to become a safe and efficient deep water swimmer. After the development of sufficient skills to perform a modified crawl stroke, the elementary back stroke, survival floating, jumping into deep water, leveling off and changing directions, swimmers will be able to swim in deep water.	ACGM	Water
PHED	1128	This course is designed to teach the students' knowledge and appreciation of basic white water canoeing/kayaking skills so they can actively engage in these activities throughout their lives. A weekend river trip is included in this course.	ACGM	Water
PHED	2125	Fitness level is improved through intermediate water exercises. A non-impact style of exercises that utilizes water resistance for increasing muscular strength, endurance, and cardiovascular fitness. Swimming skills are not required.	ACGM	Water





PHED	1125	This course is designed to promote fitness through the use of water-related activities compatible with a pool environment. Emphasis is placed on water resistant exercises, lap swimming utilizing various kicks and strokes, relays, and a variety of aquatic games.	ACGM	Water, environment
PHED	2141	Course offers opportunity to engage in multiple water sports and activities. Sports may include water volleyball, basketball, frisbee, polo and others.	ACGM	Water, opportunity
PHED	1100	Beginning level skills in various lifetime sports are presented as well as rules, etiquette, safety, strategy, offensive and defensive elements, conditioning activities and physical assessments where appropriate.	ACGM	
PHED	1101	This course will include the fundamentals of bait casting, spinning and spin casting. This course covers basic knowledge and understanding of angling techniques and concepts, and will include several tackle crafts.	ACGM	
PHED	1102	Course content emphasizes the basic playing skills of both indoor and outdoor soccer at the beginner level, as well as rules, strategies, safety, offensive and defensive patterns of play, and competitive activities.	ACGM	
PHED	1103	Course content includes fundamentals of shooting, gun safety and principles of reloading. This course includes personal safety associated with hunting and sport shooting.	ACGM	
PHED	1104	Course content includes the basic playing skills of softball at the beginner level, as well as rules, strategies, safety, offensive and defensive elements, and competitive activities. These common elements will be applied to fast pitch, slow pitch, and coed softball.	ACGM	
PHED	1105	Basic racquetball skills, rules and strategies are taught and class tournaments are conducted.	ACGM	





PHED	1106	Course content emphasizes the basic playing skills of badminton at the beginner level, as well as rules, strategies, safety, offensive and defensive elements, and competitive activities. Each of the above elements will be applied to the singles, doubles, and mixed-double games.	ACGM	
PHED	1107	Intramural competition in a variety of activities is offered for men and women. Individual and team competition are offered.	ACGM	
PHED	1108	The beginning level skills of target and field shooting and bow hunting are emphasized. History, rules of competition, preparation and care of equipment and safety are included. Equipment is furnished.	ACGM	
PHED	1109	Course content emphasizes the basic skills involved in club selection, golf course analysis, shot selection and execution of the golf swing. Rules, scoring, handicapping, and etiquette are included.	ACGM	
PHED	1110	This course emphasizes the acquisition of beginning level skills in the execution of forehand strokes, backhand strokes, the serve, and the volley. Rules, strategies of the singles and doubles games, etiquette, safety, and competitive activities are included. Equipment is furnished.	ACGM	
PHED	1111	Basic bowling skills at the beginner level as well as rules, strategies, safety, scoring and competitive activities are emphasized. All classes are conducted at an off-campus bowling lane.	ACGM	





PHED	1115	This course is for students who have limited experience in dance. Ballroom and social dancing are offered. Included are fundamental steps and rhythms of the fox-trot, waltz, tango, and recent dances. "Country" dancing includes the two-step, cotton-eyed Joe, square dance, and other dances.	ACGM
PHED	1117	Basic basketball and volleyball skills are taught. Rules, game strategies and competitive activities are included.	ACGM
PHED	1119	Instruction in weight training and conditioning techniques are stressed. Emphasis is placed on muscular strength and endurance.	ACGM
PHED	1120	Various forms of self-defense are introduced. The history and philosophy of the martial arts are explored. The student should progress from no previous experience in self-defense to an adequate skill level covering basic self-defense situations. Both mental and physical aspects of the arts are stressed. Uniform required.	ACGM
PHED	1121	Development and improvement of physical fitness through jogging is emphasized. Fitness concepts and jogging skills will be introduced.	ACGM
PHED	1122	Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out.	ACGM
PHED	1123	This course is designed for the student who desires cardiovascular fitness by means of a low impact method. Maximum physical fitness is achieved by vigorous walking. The heart rate is elevated to the appropriate target zone for peak conditioning. An extensive warm-up and cool down increases joint and muscle flexibility.	ACGM





PHED	1124	This course emphasizes the development of cardiovascular endurance by utilizing choreographed routines which may combine basic dance patterns with walking, jogging, jumping, etc. Individual fitness levels are accommodated by the intensity of the workout.	ACGM
PHED	1126	Development of cycling skills and improvement of physical fitness through cycling are emphasized. Fitness concepts, riding technique, safety, routine maintenance and repair of the cycle are fundamental topics of this course.	ACGM
PHED	1129	This course is designed to teach the students basic skills, knowledge and appreciation of backpacking and rock climbing to the extent that they can actively engage in these activities throughout their lives. A weekend backpacking trip is included in the course.	ACGM
PHED	1130	Intermediate and intermediate/advanced skills in a variety of lifetime sports are presented. Students participate in a selected sport.	ACGM
PHED	1132	Emphasis is placed on game strategy, base coaching, preparing a lineup, conducting drills, and performance on hitting, catching, and throwing.	ACGM
PHED	1133	This activity course is designed for students seeking to advance their racquetball skill level. The course content covers advanced shot execution, strategy, and the doubles game. Emphasis is placed on improved skill and strategy.	ACGM
PHED	1134	Basic skills and techniques of fitness-related activities are developed beyond the beginner level.	ACGM
PHED	1135	Course content includes refinement for basic archery skills and competitive target shooting and field archery. Equipment is furnished.	ACGM





PHED	1136	Basic skills and techniques are refined beyond the beginner level. Analysis and practice of the golf swing, swing theory and methods, strategy, and actual golf course playing are emphasized. Equipment is furnished.	ACGM
PHED	1137	Emphasis is placed on refinement of basic skills and specialty shots. Competitive activities in singles, doubles and mixed doubles will be included. Equipment is furnished.	ACGM
PHED	1140	The correct performance of the crawl, elementary back stroke, side and breast strokes will be emphasized. Some speed and endurance swimming will be required.	ACGM
PHED	1141	Skills and instruction in weight training techniques are developed beyond the beginner level.	ACGM
PHED	1142	Students will be introduced to intermediate forms of defense and combinations of self-defense methods. Emphasis is on practical application of self-defense movements. Uniform required.	ACGM
PHED	1143	Improvement of physical fitness through jogging is developed beyond the beginner stage. A higher level of fitness is expected.	ACGM
PHED	1144	Students participate in a low impact exercise walking program beyond the beginning level.	ACGM
PHED	1145	This course emphasizes the development of cardiovascular endurance through a combination of walking, jogging, jumping, etc. Individual fitness levels are developed beyond the beginner level.	ACGM
PHED	1149	Improvement of physical fitness through cycling is developed beyond the beginner stage. A higher level of fitness is expected.	ACGM





PHED	1150	This course is designed for students seeking improvement in the lifetime sport of bowling. The course covers a review of history, etiquette, care and selection of equipment, rules and scoring. Additional information will be provided on handicapping, league play, variation of grips, spot bowling and alley textures.	ACGM
PHED	1331	An overview of the program of activities in elementary school physical education. Includes the study and practice of activities and principles that promote physical fitness with an emphasis on historical development, philosophical implications, physical fitness, and kinesiology.	ACGM
PHED	1336	Outdoor recreation and organized camping are studied. Both the development of these activities and present trends are covered. This course does not satisfy the physical education activity course requirement.	ACGM
PHED	2100	This course is designed to promote fitness thru Zumba dance activities.	ACGM
PHED	2101	The yoga course offers beginning yoga postures, exercises and positions.	ACGM
PHED	2102	Course content emphasizes the basic skills of indoor soccer at the beginner level, as well as rules, strategies, safety, offensive and defensive patterns of play, and competitive activities.	ACGM
PHED	2104	Beginning course focusing the mind solely on the movements of the form helping to bring about a state of mental calm and clarity.	ACGM
PHED	2105	This class utilizes mat exercises for the improvement of core strength, flexibility, and muscle tone.	ACGM
PHED	2108	Focus on elementary balance and coordination for the improvement of daily ambulatory movements	ACGM





PHED	2109	This class addresses basic rehabilitation and correction of injury problems. Strength and flexibility exercises designed for specific return to activity are utilized.	ACGM
PHED	2110	Beginning cross-training ideas, techniques, and application to a total exercise program are discovered. Application of varied activities included.	ACGM
PHED	2111	Introductory activities involving hand-eye coordination are utilized to develop and improve skills for driving, peripheral recognition, and play.	ACGM
PHED	2112	A variety of activities, skills for physical movement and application to daily activities are taught.	ACGM
PHED	2113	The class focuses on beginning cardiovascular exercises, its varied activities, and applications to improving cardiovascular health.	ACGM
PHED	2114	This class emphasizes increased personal flexibility for the improvement of daily life.	ACGM
PHED	2126	The yoga course offers intermediate yoga postures, exercises and positions, also covering essential facts and information about yoga.	ACGM
PHED	2129	Intermediate course focusing the mind solely on the movements of the form helping to bring about a state of mental calm and clarity beyond the beginner level.	ACGM
PHED	2130	This class utilizes intermediate mat exercises for the improvement of core strength, flexibility, and muscle tone.	ACGM
PHED	2131	Course content emphasizes intermediate playing skills of indoor soccer, as well as rules, strategies, safety, offensive and defensive patterns of play, and competitive activities.	ACGM
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PHED	2133	Intermediate course designed to improve balance and coordination in the improvement of daily ambulatory movements.	ACGM	
PHED	2134	This class involves intermediate rehabilitation and correctional procedures for injury problems including strength, flexibility, and exercises designed for the specific return to activity.	ACGM	
PHED	2135	Intermediate cross-training ideas, techniques, and applications to a total exercise program are discovered.	ACGM	
PHED	2136	Intermediate activities which involve hand-eye coordination are utilized to develop improve skills for driving, peripheral recognition, and play.	ACGM	
PHED	2137	Intermediate activities which involve hand-eye coordination are utilized to develop improve skills for driving, peripheral recognition, and play.	ACGM	
PHED	2138	This class addresses intermediate cardiovascular exercise, its varied activities, and applications to improving cardiovascular health.	ACGM	
PHED	2139	This class emphasizes the intermediate topic of personal flexibility and addresses the improvement of daily life.	ACGM	
PHED	2142	Course content emphasizes the skills of disc sports at the beginner level, as well as rules, strategies, safety, patterns of play and competition activities.	ACGM	
PHED	2144	Course content emphasizes the basic playing skills of beach volleyball at the beginner level, as well as rules, strategies, safety, offensive and defensive patterns of play, and competitive activities.	ACGM	
PHED	2145	Course content emphasizes the basic playing skills of beach soccer at the beginner level, as well as rules, strategies, safety, offensive and defensive patterns of play, and competitive activities.	ACGM	





PHED	2146	Course content emphasizes the basic playing skills of basketball at the beginner level, as well as rules, strategies, safety, offensive and defensive patterns of play, and competitive activities.	ACGM	
PHED	2147	Course content emphasizes the basic skills of volleyball at the beginner level, as well as rules, strategies, safety, offensive and defensive patterns of play, and competitive activities.	ACGM	
PHIL	2306	The evaluation and application of classical and/or contemporary ethical theories connecting the good life, human conduct in society, morals and standards of value.	ACGM	ethical, common good
PHIL	1304	A comparative study of world religions, including but not limited to Hinduism, Buddhism, Judaism, Christianity, and Islam.	ACGM	world
PHIL	1301	A study of the major issues in philosophy and/or the work of major philosophical figures in philosophy. Topics may include theories of reality, theories of knowledge, theories of value and their practical application.	ACGM	
PHIL	2289	An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of philosophy.	ACGM	
PHIL	2303	The purpose of this course is to introduce the student to formal and informal logic, including syllogisms, prepositional and predicate logic, logical proofs in a system of rules, fallacies, definitions, analogies, and use of language.	ACGM	
PHIL	2307	A study of major issues in social and political theory and/or the work of major philosophical figures in this area.	ACGM	





PHIL	2316	Study of major philosophers and philosophical themes from ancient through medieval periods. Emphasis may vary from semester to semester.	ACGM	
PHIL	2321	A study of the major issues in the philosophy and experience of religion. Topics may include the existence and nature of God, the relationships between faith and reason, the nature of religious language, religious experience, and the problem of evil. Emphasis may vary from semester to semester.	ACGM	
PHIL	2389	An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of philosophy. There is a two credit or a three credit course available.	ACGM	
PHTC	1300	An introduction to computer and software instruction for imaging. Includes color, gray scale, image conversion, presentation, and ethics.	WECM	
PHTC	1351	Presentation of photographic techniques used by photojournalists in newspapers, magazines, trade publications, and digital media to include news, feature, sports, editorial portraits, and photo essays. Includes a study of layout design and the freelance market.	WECM	
PHTC	1380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





PHTC	2331	Study of the equipment, processes, and procedures necessary for the photography of building exteriors and interiors, dusk/night and night architectural landscapes, and construction progress.	WECM	
PHTC	2342	Skill development in fashion photography in terms of trends and techniques included in studio and location work. Emphasizes model direction and lighting control.	WECM	
PHTC	2349	Continued skill development in the use of the computer for retouching, copying, photographic restoration, color correction, data importation, composite imaging, and background dropout and replacement. Advanced concepts in the use of the computer and software for photographic manipulation and output.	WECM	
PHTC	2351	Advanced concepts of photojournalism. May include documentary, corporate, and annual report photography.	WECM	
PHYS	1405	Conceptual level survey of topics in Physics intended for liberal arts and other non-science majors. Topics include mechanics, energy conservation, atomic nature of matter and thermodynamics. The history of scientific developments and their impact on daily life are discussed. Also included are laboratory experiments that emphasize a conceptual understanding of Physics.	ACGM	conservation
PHYS	1417	This course is for non-science majors that surveys topics from physics, chemistry, geology, astronomy and meteorology. It focuses on the interaction of physics and chemistry with the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are emphasized. Selected principles and concepts are explored.	ACGM	earth





PHYS	1401	The first semester of an algebra and trigonometry - based fundamentals of physics sequence. The principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces are studied with emphasis on problem solving. Laboratory experiments supporting the topics are included.	ACGM	rule of law
PHYS	1415	Course designed for non-science majors that surveys topics from physics, chemistry, geology, astronomy, and meteorology. It is a study of the basic principles and concepts of physics and chemistry, showing the relationship of these two sciences to the physical world at an introductory level.	ACGM	world
PHYS	1402	The second semester of an algebra and trigonometry - based fundamental principles of physics sequence. The principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics are studied with emphasis on problem solving. Laboratory experiments supporting the topics are included.	ACGM	
PHYS	1403	The study of stars, galaxies, and the universe outside our solar system. Introduces the properties of stars, stellar evolution, black holes, galaxies and current cosmological ideas. Emphasis is on the application of scientific principles and explanation of phenomena in the universe. The laboratory includes outdoor viewing sessions and the use of spectra.	ACGM	





PHYS	1404	Study of the sun and its solar system, including its origin. Introduction to the solar system and the historical development of astronomical ideas. Topics include the study of the celestial sphere, the planets and their satellites, the sun and other objects in the solar system. Emphasis is on the application of scientific principles and explanation of phenomena in the solar system. The laboratory includes outdoor viewing sessions, constellation identification and the use of telescopes.	ACGM	
PHYS	1407	Conceptual level survey of topics in Physics intended for liberal arts and other non-science majors. Topics include wave motion, acoustics, electricity, magnetism, optics, relativity, atomic and nuclear physics. The history of scientific developments and their impact on daily life are discussed. Also included are laboratory experiments that emphasize a conceptual understanding of Physics.	ACGM	
PHYS	2389	An instructional program designed to integrate on-campus study with practical hands-on work experience in the physical sciences. In conjunction with class seminars, the individual students will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena.	ACGM	





PHYS	2425	The first semester of calculus - based physics sequence for science, computer science, and engineering majors. The principles and applications of classical mechanics, including harmonic motion, physical systems and thermodynamics are studied with emphasis on problem solving. Performance of basic laboratory experiments supporting theoretical physics principles and applications of classical mechanics, including harmonic motion, physical systems and thermodynamics. Also includes experimental design, data collection and analysis, and preparation of laboratory reports.	ACGM	
PHYS	2426	The second semester of calculus - based physics sequence for science, computer science, and engineering majors. Principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics are studied. Performance of basic laboratory experiments supporting theoretical physics principles and applications of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics. Also includes experimental design, data collection and analysis, and preparation of laboratory reports.	ACGM	
PLAB	1223	Skill development in the performance of a variety of blood collection methods using proper techniques and standard precautions. Includes vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture, and specimen collection on adults, children, and infants. Emphasis on infection prevention, patient identification, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology.	WECM	Access, infection prevention





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PLAB	1260	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
POFI	1301	Overview of computer office applications including current terminology and technology. Introduction to computer hardware, software applications, and procedures.	WECM	technology
POFI	1341	Continued study of current computer terminology and technology. Advanced skill development in computer hardware, software applications, and procedures.	WECM	technology
POFI	1441	Continued study of current computer terminology and technology. Advanced skill development in computer hardware, software applications, and procedures.	WECM	technology
POFI	1104	Computer application specific software. Emphasizes the concurrent development of office skills and computer knowledge.	WECM	
POFI	1204	Computer application specific software. Emphasizes the concurrent development of office skills and computer knowledge.	WECM	
POFI	1349	Skill development in concepts, procedures, and application of spreadsheets for business.	WECM	
POFI	2301	Word processing software focusing on business applications.	WECM	
POFI	2331	In-depth coverage of desktop publishing terminology, text editing, and use of design principles. Emphasis on layout techniques, graphics, multiple page displays, and business applications.	WECM	
POFI	2340	Advanced word processing techniques using merging, macros, graphics, and desktop publishing. Includes extensive formatting for technical documents.	WECM	
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POFI	2440	Advanced word processing techniques using merging, macros, graphics, and desktop publishing. Includes extensive formatting for technical documents.	WECM	
POFI	2450	In-depth instruction of database theory and the practical applications of a database.	WECM	
POFM	1327	Survey of medical insurance including the life cycle of various claim forms, terminology, litigation, patient relations, and ethical issues.	WECM	ethical
POFM	1191	The simulation provides the students with the opportunity to analyze situations unique to a medical office setting, make decisions related to those situations, as well as experience the daily duties and responsibilities associated with an entry-level medical front office position. The simulation requires students to perform a series of tasks using Medisoft, a practice management software. Each task is an application of the knowledge required in the medical office. Topics include patient records, patient transactions, appointments, and reports. This course may be repeated if topics and learning outcomes vary.	WECM	opportunity, management
POFM	1370	The course is designed to provide a practical bridge to span the gap between how medical records have been kept for the past centuries and how they are kept in today's electronic world. The practical, hands-on experience uses a popular electronic health records software that is used by a wide range of medical specialties and health-care professionals. Topics include electronic patient charts; office visits; clinical tools, such as creating a patient instruction sheet; electronic templates; and electronic bulletin boards and messages.	WECM	world





POFM	1280	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
POFM	1300	Presentation and application of basic coding rules, principles, guidelines, and conventions utilizing various coding systems.	WECM	
POFM	1302	Medical software applications for the management and operation of health care information systems.	WECM	
POFM	1317	Instruction in medical office procedures including appointment scheduling, medical records creation and maintenance, telephone communications, coding, billing, collecting, and third party reimbursement.	WECM	
POFM	2333	Create, format and produce publishable documents in a health care setting. Fundamental concepts, terminology, benefits and functions of the electronic health record (EHR) will be examined with hands-on training using a realistic, web-based EHR software application.	WECM	
POFT	2312	Development of writing and presentation skills to produce effective business communications.	WECM	effective
POFT	1309	Study of current office procedures, duties, and responsibilities applicable to an office environment.	WECM	environment
POFT	1328	Skill development in planning and conducting business presentations including communication and media skills.	WECM	planning
POFT	1325	Skill development in business math problem-solving using technology.	WECM	technology
POFT	1127	Skill development in keyboarding techniques. Emphasis on the development of speed and accuracy.	WECM	





POFT	1301	Introduction to a practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business.	WECM
POFT	1313	Preparation for career success including ethics, interpersonal relations, professional attire, and advancement.	WECM
POFT	1319	Introduction to basic records information management filing systems including manual and electronic filing.	WECM
POFT	1321	Fundamentals of business mathematics including analytical and critical thinking skills.	WECM
POFT	1329	Skill development keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents.	WECM
POFT	1349	In-depth coverage of office procedures with emphasis on decision-making, goal setting, management theories, and critical thinking.	WECM
POFT	1380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM
POFT	1382	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM
POFT	2203	Review, correct, and improve keyboarding techniques for the purpose of increasing speed and improving accuracy.	WECM





POFT	2301	A continuation of keyboarding skills emphasizing acceptable speed and accuracy levels and formatting documents.	WECM	
POFT	2331	Advanced concepts of project management and office procedures integrating software applications, critical thinking, and problem-solving skills.	WECM	
POFT	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
PORT	1411	This is the first semester of academic transfer Portuguese. This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented.	ACGM	
PORT	1412	This is the second semester of academic transfer Portuguese. This course continues the oral practice, reading, writing, grammar and cultural studies begun in PORT 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax.	ACGM	





PORT	2311	This is the third semester of academic transfer Portuguese. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded.	ACGM	
PORT	2312	This is the fourth semester of academic transfer Portuguese. This course is a continuation of PORT 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture.	ACGM	
PSTR	1301	Fundamentals of baking including dough, quick breads, pies, cakes, cookies, tarts, and doughnuts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the evaluation of baked products. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. This course must be completed with a grade of 'C' or better. This course requires practical knowledge and use of baking techniques and equipment.	WECM	Clean
PSTR	1310	Focus on preparation of American and European style pie and tart fillings and dough, cookies, teacakes, custard and batters. Instruction in finishing and presentation techniques. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	Clean





PSTR	1442	Advanced baking techniques to include volume production of a variety of breads and desserts. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	Clean
PSTR	2207	A course in decoration of specialized and seasonal products. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	Clean
PSTR	2330	Skill development for culinary competition by offering advanced experience in salon presentations. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	Clean
PSTR	1312	Focus on preparation of laminated doughs to include puff pastry, croissant, and Danish and a variety of pate a choux (eclair paste) products and donuts. Fillings and finishing techniques included. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	Clean, Air





PSTR	1206	Introduction to skills, concepts and techniques of cake decorating. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. This course requires practical knowledge of requirements for Food and Sanitation Guidelines as set by Health and Safety Standards and practical knowledge using commercial baking equipment.	WECM	Clean, Food
PSTR	1305	Concentration on fundamentals of chemically and yeast raised breads and rolls. Instruction on commercial preparation of a wide variety of products. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals. This course must be completed with a grade of 'C' or better. This course requires practical knowledge of requirements for Food and Sanitation Guidelines as set by Health and Safety Standards and practical knowledge using commercial baking equipment.	WECM	Clean, Food
PSTR	2331	A study of classical desserts, French and international pastries, hot and cold desserts, ice creams and ices, chocolate work, and decorations. Emphasis on advanced techniques. Baking and pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching bending, working around open flames and with cleaning chemicals. This course must be completed with a grade of 'C' or better.	WECM	Clean, unpaid work





PSTR	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
PSTR	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
PSTR	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
PSTR	1343	Introduction to management, marketing, supervision and sanitation principles required in retail and wholesale bakery operations. Emphasis on cost control, pricing, computer usage and personnel issues.	WECM	
PSTR	1364	Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student.	WECM	
PSTR	2364	Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student.	WECM	
PSYC	2315	Study of the processes involved in adjustment of individuals to their personal and social environments.	ACGM	environment
PSYC	2319	Study of individual behavior within the social environment. May include topics such as the socio-psychological process, attitude formation and change, interpersonal relations, and group processes.	ACGM	environment





PSYC	2306	This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives — biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her own decision-making on sexual issues outside of the classroom.	ACGM	Human sexuality
PSYC	2301	General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes.	ACGM	
PSYC	2314	Life-Span Growth and Development is a study of social, emotional, cognitive and physical factors and influences of a developing human from conception to death.	ACGM	
PSYC	2316	Study of various approaches to determinants, development, and assessment of personality.	ACGM	
PSYT	2335	Examine the American family from historical and modern perspectives. Emphasis on current issues regarding structures of relationships, marriage, and social change.	WECM	family, marriage
PSYT	1395	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
PSYT	1313	Development of personal, social, and work adjustment skills.	WECM	
PSYT	2321	Examination of crisis management and intervention theories in assisting clients in crisis situations.	WECM	
PSYT	2345	An analysis of behavior management and cognitive theories and techniques with emphasis on their applications.	WECM	
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QCTC	301	The study of integrating work processes using team participation through employee empowerment and teamwork emphasizing the philosophy of customer service and satisfaction.	WECM	Participation, empower
QCTC	1243	Principles and applications designed to introduce quality assurance.	WECM	
QCTC	1343	Principles and applications designed to introduce quality assurance.	WECM	
RADR	2217	A presentation of the disease process and common diseases and their appearance on medical images.	WECM	communicable diseases
RADR	1203	An introduction in patient assessment, infection control procedures, emergency and safety procedures, communication and patient interaction skills, and basic pharmacology.	WECM	emergency
RADR	2235	A capstone course focusing on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning.	WECM	employment
RADR	2335	A capstone course focusing on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning.	WECM	employment
RADR	1201	An overview of the historical development of radiography, basic radiation protection, an introduction to medical terminology, ethical and legal issues for health care professionals, and an orientation to the profession and the health care system.	WECM	ethical
RADR	1202	This course will introduce the student to the scientific process of radiographic image evaluation.	WECM	





RADR	1250	Assessment of radiographic images with an emphasis on identifying image artifacts, positioning qualities of the image, and technical qualities of the image using advanced concepts.	WECM
RADR	1266	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM
RADR	1267	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM
RADR	1291	Primary and/or secondary research in current and emerging issues in the Radiologic Sciences. Basic research principles, scientific inquiry, and interpretation of professional literature are emphasized.	WECM
RADR	1302	This course will introduce the student to the scientific process of radiographic image evaluation.	WECM
RADR	1311	An introduction to radiographic positioning terminology, the proper manipulation of equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of basic anatomy.	WECM
RADR	1313	Radiographic image quality and the effects of exposure variables.	WECM
RADR	1367	Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student.	WECM
RADR	1411	An introduction to radiographic positioning terminology, manipulation of equipment, positioning and alignment of the anatomic structure and equipment, and evaluation of images for demonstration of basic anatomy.	WECM





1470	A study of radiographic image qualities and the effects of exposure variables upon various image receptors to include both film and digital media.	WECM
2209	Equipment and physics of x-ray production. Includes basic x-ray circuits. Also examines the relationship of conventional and digital equipment components to the imaging process.	WECM
2213	A study of the effects of radiation exposure on biological systems, typical medical exposure levels, methods for measuring and monitoring radiation and methods for protecting personnel and patients from excessive exposure.	WECM
2233	An exploration of specialized imaging modalities with an emphasis on the concepts and theories of equipment operation and their integration for medical diagnosis.	WECM
2240	In-depth coverage of anatomic relationships that are present under various sectional orientations as depicted by medical imaging.	WECM
2266	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM
2267	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM
2301	A continuation of the study of the proper manipulation of radiographic equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of anatomy.	WECM
2305	Radiographic image quality and the effects of exposure variables, and the synthesis of all variables in image production.	WECM
	2209 2213 2233 2240 2266 2267 2301	exposure variables upon various image receptors to include both film and digital media. 2209





RADR	2331	Continuation of positioning; alignment of the anatomical structure and equipment, evaluation of images for proper demonstration of anatomy and related pathology.	WECM	
RADR	2333	An exploration of specialized imaging modalities with an emphasis on the concepts and theories of equipment operation and their integration for medical diagnosis.	WECM	
RADR	2340	Anatomic relationships that are present under various sectional orientations as depicted by computed tomography or magnetic resonance imaging.	WECM	
RADR	2367	Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student.	WECM	
RADR	2401	A continuation of the study of the proper manipulation of radiographic equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of anatomy.	WECM	
RBTC	2445	This is a capstone course that provides the student with laboratory experience in the installation, set-up, and testing of robotic cells. Topics include maintenance. The student will demonstrate familiarity with hardwiring and interfacing PLCs, robots, CNC equipment, and support equipment; troubleshoot and debug equipment to make it function in a live automated environment; and apply design techniques to maintain maximum cycle times on an automated system.	WECM	environment





RELE	1381	Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	cooperation
RELE	1303	A study of the central purposes and functions of an appraisal, social, and economic determinant of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting.	WECM	economic, microfinance
RELE	2301	A study of law of agency including principal-agent and master-servant relationships, the authority of an agent, the termination of an agent's authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying procedures, and the disclosure of an agency.	WECM	employment
RELE	2388	A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.	WECM	enable
RELE	2389	A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.	WECM	enable
RELE	1329	A study of environmental issues affecting the real estate industry including hazardous substances, underground storage tanks, and wetlands.	WECM	environment, hazardous substances, land consumption, toxic





RELE	1319	An overview of monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments, equal credit opportunity laws affecting mortgage lending, and the state housing agency.	WECM	equal, opportunity, debt relief, debt restructuring
RELE	1315	A study of the role of the property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance reports, habitability laws, and the Fair Housing Act.	WECM	Housing, Air, dignity, land consumption, material consumption, material sufficiency
RELE	1201	An overview of licensing as a real estate broker and salesperson, ethics of practice, titles to and conveyancing of real estate, legal descriptions, law of agency, deeds, encumbrances and liens, distinctions between personal and real property, contracts, appraisal, finance and regulations, closing procedures, and real estate mathematics. Also includes federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. This course must be taken concurrently with RELE 2209.	WECM	Housing, discrimination, microfinance
RELE	1301	Overview of licensing as a real estate broker or salesperson. Includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. Fulfills at least 30 of 60 hours of required instruction for salesperson license.	WECM	Housing, discrimination, microfinance





ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing, discrimination, housing credit discrimination, and community reinvestment. Fulfills at least 30 of 60 hours of required instruction for salesperson license. RELE 1406 Overview of licensing as a broker or salesperson. Includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. Fulfills the 60-hour requirement for salesperson license. RELE 2331 A study of law of agency, planning and organization, operational policies and procedures, recruiting, selection and training of personnel, records and control, and real estate firm analysis and expansion criteria.					
ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. Fulfills the 60-hour requirement for salesperson license. RELE 2331 A study of law of agency, planning and organization, operational policies and procedures, recruiting, selection and training of personnel, records and control, and real estate firm analysis and expansion criteria. RELE 1309 Provides a study of legal concepts of real estate, land description, real property rights, estates in land, contracts, conveyances, encumbrances, foreclosures, recording rights, basic rights, land consumption	RELE	1338	ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing, discrimination, housing credit discrimination, and community reinvestment. Fulfills at least 30 of 60 hours of required instruction for salesperson	WECM	Housing, discrimination, microfinance
operational policies and procedures, recruiting, selection and training of personnel, records and control, and real estate firm analysis and expansion criteria. RELE 1309 Provides a study of legal concepts of real estate, land description, real property rights, estates in land, contracts, conveyances, encumbrances, foreclosures, recording rights, basic rights, land consumption	RELE	1406	ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. Fulfills the	WECM	Housing, microfinance
description, real property rights, estates in land, contracts, conveyances, encumbrances, foreclosures, recording rights, basic rights, land consumption	RELE	2331	operational policies and procedures, recruiting, selection and training of personnel, records and control, and real	WECM	planning
	RELE	1309	description, real property rights, estates in land, contracts, conveyances, encumbrances, foreclosures, recording	WECM	rights, basic rights, land consumption





RELE	1191	Topics address recently identified current event, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology
RELE	1291	Topics address recently identified current event, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology
RELE	1323	A study of the availability of technology, especially software, and its ability to help a real estate agent become more productive. Includes data base mapping interest and software application.	WECM	technology
RELE	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
RELE	1200	Promulgated Contract Forms, which shall include but is not limited to unauthorized practice of law, broker-lawyer committee, current promulgated forms, commission rules governing use forms and case studies involving use of forms.	WECM	
RELE	1211	Elements of a contract, offer and acceptance, statute of frauds, specific performance and remedies for breach, unauthorized practice of law, commission rules relating to use of adopted forms, and owner disclosure requirements.	WECM	
RELE	1300	Promulgated Contract Forms, shall include but is not limited to unauthorized practice of law, broker-lawyer committee, current promulgated and approved forms, commission rules governing use forms and case studies involving use of forms.	WECM	





RELE	1307	Financing, evaluation, and management of real estate investment. Emphasis on real estate investment characteristics, techniques of investment analysis, timevalued money, discounted investment criteria, leverage, and applications to property tax implications of owning real estate.	WECM	
RELE	1311	Elements of a contract, offer and acceptance, statute of frauds, specific performance and remedies for breach, unauthorized practice of law, commission rules relating to use of adopted forms, and owner disclosure requirements.	WECM	
RELE	1321	A study of real estate professionalism and ethics; characteristics of successful salespersons; time management; psychology of marketing; listing procedures; advertising; negotiating and closing financing; and the deceptive trade practice act, consumer protection act, and commercial code.	WECM	
RELE	1324	An introduction to the mortgage loan application process. Topics include regulatory compliance and documentation; real estate contracts; the mortgage application process, interview techniques; credit, income and property qualification, quality controls and procedures.	WECM	
RELE	1325	Basic arithmetic skills. Includes mathematical logic, percentages, interest, time value of money, depreciation, amortization, proration, and estimation of closing statements.	WECM	





RELE	2305	A study of the different types of building systems and materials used in the design and construction of real property. Covers residential construction and commercial building systems and materials. Includes different structural building systems with emphasis on wood-related products, concrete and concrete masonry, brick, stone and steel units. The Texas Real Estate Commission Promulgated Property Condition Addendum will be addressed along with inspector and client agreements, tools and procedures, and electro-mechanical systems.	WECM	
RELE	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
RELE	2381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
RNSG	1311	Basic principles of pathophysiology emphasizing nursing applications. Topics include principles of homeostasis related to body systems.	WECM	bodily health
RNSG	1160	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Licensing/Certification: Board of Nursing (BON).	WECM	enable





RNSG	1161	A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinical professional. Licensing/certification Agency: Texas Board of Nursing (BON).	WECM	enable
RNSG	1360	A health-related work-based learning experience in a medical-surgical setting that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
RNSG	1362	A health-related work-based clinical experience in a medical-surgical adult setting that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Licensing/Certification Agency: Board of Nursing (BON).	WECM	enable
RNSG	2160	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Licensing/Certification: Board of Nursing (BON).	WECM	enable
RNSG	2161	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Licensing/Certification: Board of Nursing (BON).	WECM	enable
RNSG	2360	A health-related work-based clinical experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Licensing/Certification: Board of Nursing (BON).	WECM	enable





RNSG	2363	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Licensing/certification Agency: Texas Board of Nursing (BON).	WECM	enable
RNSG	2362	A health related clinical work-based learning experience that enables the student to apply nursing theory, skills, and concepts. Direct supervision is provided by the clinical professional. The course utilizes systematic problem-solving process and critical thinking skills to provide nursing care of adults with common care needs in diverse health care settings. Focus is on health promotion, work, and critical thinking skills. Emphasis is on performance of an adult assessment, pharmacotherapeutic interventions, and the collaboration in course-related and basic workplace interventions. Licensing/Certification Agency: Board of Nursing (BON).	WECM	enable, basic needs
RNSG	1105	Study of the concepts and principles necessary to perform basic nursing skills for the adult patient; and demonstrate competence in the performance of nursing procedures. Content includes knowledge, judgment, skills, and professional values within a legal/ethical framework. This course lends itself to a blocked approach.	WECM	ethical





RNSG	1126	Expanding professional nursing concepts and exemplars within the professional nursing roles. Applying concepts of clinical judgment, ethical-legal, evidence-based practice, patient-centered care, professionalism, safety, and team/collaboration to the exemplars presented in the Health Care Concepts II course. Introduces concepts of leadership and management. Emphasizes role development of the professional nurse. This course lends itself to a concept-based approach. Licensing/certification Agency: Texas Board of Nursing (BON).	WECM	ethical
RNSG	1144	Study of the concepts and principles necessary to perform intermediate or advanced nursing skills for the adult patient and demonstrate competence in the performance of nursing procedures. Content includes knowledge, judgment, skills and professional values within a legal/ethical framework. This course lends itself to a blocked approach.	WECM	ethical
RNSG	1309	Overview of nursing and the role of the professional nurse as a provider of patient-centered care, coordinator of care, patient safety advocate, and member of a profession. Topics include knowledge, judgment, skills and professional values with a legal/ethical framework. Licensing/Certification Agency: Texas Board of Nursing (BON).	WECM	ethical





RNSG	2138	Integration of professional nursing concepts and exemplars within the professional nursing roles. Synthesizes concepts of clinical judgment, ethical-legal, evidence-based practice, leadership and management, patient-centered care, professionalism, teamwork, and collaboration through exemplars presented in the Health Care Concepts courses. Emphasizes concept of quality improvement and introduces health policy. Incorporates concepts into role development of the professional nurse. This course lends itself to a concept-based approach. Licensing/certification Agency:	WECM	ethical
RNSG	2201	Texas Board of Nursing (BON). Study of concepts related to the provision of nursing care for children and their families, emphasizing judgment, and professional values within a legal/ethical framework. This course lends itself to a blocked approach.	WECM	ethical
RNSG	1413	This course introduces the role of the professional nurse as provider of patient-centered care, patient safety advocate, member of health care team, and member of the profession. Content includes fundamental concepts of nursing practice, history of professional nursing, and a systematic framework for decision-making and critical thinking. The mechanisms of disease and the needs and problems that can arise are discussed and how the nursing process helps manage the patient through these issues. Emphasis is on knowledge, judgment, skills, and professional values within a legal/ethical framework. Licensing/Certification Agency: Board of Nursing (BON).	WECM	ethical, basic needs





RNSG	1341	Study of the general principles of caring for selected adult clients and families in structured settings with common medical-surgical health care needs related to each body system. Emphasis on knowledge, judgment, skills, and professional values within a legal/ethical framework. Licensing/Certification Agency: Texas Board of Nursing (BON).	WECM	ethical, basic needs, bodily health
RNSG	1441	Basic integration of the role of the professional nurse as a provider of patient-centered care, coordinator of care, patient safety advocate, member of health care team, and member of profession. Study of the common concepts of caring for adult patients and families with medical-surgical health care needs related to body systems, emphasizing knowledge, judgment, skills and professional values within legal/ethical framework. Study of the general principles of caring for selected adult clients and families in structured settings with common medical-surgical health care needs related to each body system. Emphasis on knowledge judgment, skills, and professional values within a legal/ethical framework. Licensing/Certification Agency: Board of Nursing (BON).	WECM	ethical, basic needs, bodily health





RNSG	1343	Integration of previous knowledge and skills related to common adult health needs into the continued development of the professional nurse as a provider of patient-centered care, coordinator of care, patient-safety advocate, and member of a profession in the care of adult clients/families in structured health care settings with complex medical-surgical health care needs associated with each body system. Emphasis is on knowledge, judgments, skills, and professional values within a legal/ethical framework. Licensing/Certification Agency: Texas Board of Nursing (BON).	WECM	ethical, bodily health
RNSG	1443	Integration of previous knowledge and skills related to common adult health needs into the continued development of the professional nurse as a provider of patient-centered care, patient safety advocate, member of the health care team, and member of a profession in the care of adult patients and families with complex medical-surgical health care needs associated with body systems. Emphasis on complex knowledge, judgments, skills, and professional values within a legal/ethical framework. Licensing/Certification Agency: Board of Nursing (BON).	WECM	ethical, bodily health
RNSG	2213	Principles and concepts of mental health, psychopathology, and treatment modalities relating to the nursing care of clients and their families. Emphasis is on assessment, communication techniques, promotion of mental health, caring, ethical/legal aspects, collaborative roles of nurse in a variety of settings. Content includes applicable competencies in basic workplace skills. Licensing/Certification: Board of Nursing (BON).	WECM	ethical, collaborative





RNSG	2208	Study of concepts related to the provision of nursing care for normal childbearing families and those at risk, as well as women's health issues; competency in knowledge, judgment, skill, and professional values within a legal/ethical framework, including a focus on normal and high-risk needs for the childbearing family during the preconception, prenatal, intrapartum, neonatal, and postpartum periods; and consideration of selected issues in women's health. Licensing/Certification: Board of Nursing (BON).	WECM	ethical, family, basic needs
RNSG	1301	Introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of each drug classification. Topics include the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework. Licensing/Certification: Board of Nursing (BON).	WECM	ethical, tobacco use
RNSG	1430	In-depth coverage of foundational health care concepts with application through selected exemplars. Concepts include comfort, diversity, elimination, functional ability, human development, mobility, nutrition, sensory perception, sleep, thermoregulation, grief, and tissue integrity. Emphasizes development of clinical judgment skills in the beginning nurse. Licensing/certification Agency: Texas Board of Nursing (BON).	WECM	human development, malnutrition





RNSG	1118	Transition to professional nursing competencies in the care of patients throughout the lifespan. Validates proficiency in psychomotor skills and clinical reasoning in the performance of nursing procedures related to the concepts of: clinical judgment, comfort, elimination, fluid and electrolytes, nutrition, gas exchange, safety, functional ability, immunity, metabolism, mobility, and tissue integrity. Includes health assessment and medication administration. Licensing/certification Agency: Texas Board of Nursing (BON).	WECM	malnutrition
RNSG	1216	Development of professional nursing competencies in the care of patients throughout the lifespan. Emphasizes psychomotor skills and clinical reasoning in the performance of nursing procedures related to the concepts of: clinical judgment, comfort, elimination, fluid and electrolytes, nutrition, gas exchange, safety, functional ability, immunity, metabolism, mobility, and tissue integrity. Includes health assessment and medication administration. This course lends itself to a concept-based approach. This course takes place in a laboratory setting. Licensing/certification Agency: Texas Board of Nursing (BON).	WECM	malnutrition
RNSG	2539	In-depth coverage of advanced health care concepts with nursing application through selected exemplars. Concepts include, cognition, immunity, clotting, fluid and electrolyte balance, gas exchange, metabolism, nutrition, perfusion, tissue integrity, and interpersonal relationships. Continuing development of clinical judgment with integration of all health care concepts. This course lends itself to a concept-based approach. Licensing/certification Agency: Texas Board of Nursing (BON).	WECM	malnutrition





RNSG	1538	In-depth coverage of health care concepts with nursing application through selected exemplars. Concepts include cellular regulation, end of life, immunity, interpersonal relationships, grief, human development, intracranial regulation, mood/affect, comfort, sexuality, mobility, and reproduction. Provides continuing opportunities for development of clinical judgment skills. Licensing/certification Agency: Texas Board of Nursing (BON).	WECM	opportunities
RNSG	1533	In-depth coverage of health care concepts with application through selected exemplars. Concepts include acid-base balance, coping, clotting, cognition, fluid and electrolytes, gas exchange, immunity, metabolism, nutrition, comfort, and perfusion. Provides continuing opportunities for development of clinical judgment skills. Licensing/certification Agency: Texas Board of Nursing (BON).	WECM	opportunities, malnutrition
RNSG	1125	Introduction to professional nursing concepts and exemplars within the professional nursing roles: member of profession, provider of patient-centered care, patient safety advocate, and member of the health care team. Content includes clinical judgment, communication, ethicallegal, evidenced-based practice, health promotion, health information technology, patient-centered care, patient education, professionalism, safety, and team/collaboration. Emphasizes role development of the professional nurse. Licensing/certification Agency: Texas Board of Nursing (BON).	WECM	technology, ethical





RNSG	1137	Application of professional nursing concepts and exemplars within the professional nursing roles. Utilizes concepts of clinical judgment, ethical-legal, evidenced-based practice, patient-centered care, professionalism, safety, teamwork and collaboration. Introduces the concepts of quality improvement, health information technology, and health care organizations. Incorporates concepts into role development of the professional nurse. This course lends itself to a concept-based approach. Licensing/certification Agency: Texas Board of Nursing (BON).	WECM	technology, ethical





RNSG	1324	Integration of previous health care knowledge and skills into the role development of the professional nurse as a provider of patient-centered care, patient safety advocate, member of health care team, and member of the profession. Emphasis is on clinical decision-making for patients and their families. Review of selected health care and professional nursing concepts with application through exemplars. Health care concepts include comfort, diversity, elimination, functional ability, human development, mobility, nutrition, sensory perception, sleep, coping, thermoregulation, tissue integrity, acid-base balance, clotting, cognition, fluid and electrolyte balance, gas exchange, immunity, metabolism, nutrition, grief, and perfusion. Professional nursing concepts include clinical judgment, communication, ethical-legal, evidence-based practice, health promotion, health information technology, patient-centered care, patient education, professionalism, safety, teamwork and collaboration. Introduces concepts of leadership and management. Licensing/certification Agency: Texas Board of Nursing (BON).	WECM	technology, ethical
RNSG	1128	An introduction to concept-based learning with emphasis on selected pathophysiological concepts with nursing applications. Concepts include acid-base balance, fluid and electrolytes, immunity, gas exchange, perfusion, metabolism, coping, and tissue integrity. This course lends itself to a concept-based approach. Develops essential knowledge and skills of airway care and	WECM	
NJF I	1311	mechanical ventilation.	VVECIVI	Air





RSPT	2310	Etiology, pathogenesis, pathology, diagnosis, history, prognosis, manifestations, treatment, and detection of cardiopulmonary diseases.	WECM	communicable diseases
RSPT	1260	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
RSPT	1360	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
RSPT	2163	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
RSPT	2262	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
RSPT	2263	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
RSPT	2362	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable
RSPT	2325	A study of physical, radiological, hemodynamic, laboratory, nutritional and cardiopulmonary diagnostic assessments.	WECM	malnutrition





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RSPT	1141	A study of respiratory home care/rehabilitation equipment, procedures, and patient education.	WECM	
RSPT	1213	A study of basic pharmacological principles/practices of respiratory care drugs. Emphasis on classification, routes of administration, dosages/calculations, and physiological interaction.	WECM	
RSPT	1227	Review of the theoretical and practical applications of mathematics and physics with focus on the applicability and clinical utility of the modalities, techniques, procedures, equipment, and diagnostic tests utilized in respiratory care.	WECM	
RSPT	1307	Anatomy and physiology of the cardiovascular and pulmonary systems.	WECM	
RSPT	1431	Continued development of knowledge and skills for respiratory care.	WECM	
RSPT	2131	Theory of clinical simulation examinations. Includes construction types, scoring, and mechanics of taking the computerized simulation examination.	WECM	
RSPT	2166	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
RSPT	2231	Theory of clinical simulation examinations. Includes Construction types, scoring, and mechanics of taking the computerized Simulation examination.	WECM	
RSPT	2258	Instruction of the integration of patient examination techniques, including patient history and physical exam, lab studies, x-ray, pulmonary function, arterial blood gases, and invasive and noninvasive hemodynamics.	WECM	
RSPT	2314	The study of mechanical ventilation with emphasis on ventilator classification, methods, principles, and operational characteristics.	WECM	





RSPT	2317	A study of drugs that affect cardiopulmonary systems. Emphasis on classification, route of administration, dosages/calculations, and physiological interactions.	WECM	
RSPT	2353	A study of neonatal and pediatric cardiopulmonary care.	WECM	
RSPT	2453	A study of neonatal and pediatric cardiopulmonary care.	WECM	
RSTO	1304	Introduces the principles, concepts, and systems of professional table service. Topics include dining room organization, scheduling, and management of food service personnel. Dining Room Service classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, working around open flames and with cleaning chemicals.	WECM	Clean, Food
RSTO	1301	A study of the beverage service of the hospitality industry including spirits, wines, beers, and non-alcoholic beverages. Topics include purchasing, resource control, legislation, marketing, physical plant requirements, staffing, service, and the selection of wines to enhance foods.	WECM	Food
RSTO	1325	Study of purchasing and inventory management of foods and other supplies include development of purchase specifications, determination of order quantities, formal and informal price comparisons, proper receiving procedures, storage management, and issue procedures. Emphasis on product cost analysis, yields, pricing formulas, controls, and record keeping at each stage of the purchasing cycle.	WECM	Food





RSTO	2301	A study of financial principles and controls of food service operation including review of operation policies and procedures. Topics include financial budgeting and cost analysis emphasizing food, beverage, and labor costs, operational analysis, and international and regulatory procedures.	WECM	Food
RSTO	2307	Principles, techniques, and applications for both on- premises, off-premises, and group marketing of catering operations including food preparation, holding, and transporting techniques.	WECM	Food
RSTO	1313	Fundamentals of recruiting, selection, and training of food service and hospitality personnel. Topics include job descriptions, schedules, work improvement, motivation, and applicable personnel laws and regulations. Emphasis on leadership development.	WECM	Food, decent work
RSTO	1306	Overview of the planning, development, and feasibility aspects of building or renovating a food service facility. Application of principles of work and flow analysis, spatial relationships, and equipment selection as they relate to the overall layout and design.	WECM	planning, Food
RSTO	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
RSTO	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events





RSTO	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
RSTO	1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
RSTO	1319	A study of the growing regions, production, processing, and distribution of domestic and international wines. Topics include types of wine grapes, varieties of wine, proper storage procedures, and the techniques of proper wine service. Student must be 21 on first class day.	WECM	
RSTO	1380	Career related activities encountered in the student's area of specialization are offered through an individualized agreement among the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. Includes a lecture component.	WECM	
RSTO	2280	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience.	WECM	





RSTO	2380	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
RTVB	1380	Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	cooperation
RTVB	1317	History and future of electronic media. Includes radio, television, Internet, and convergent technologies. Recognizes regulatory and economic issues. Explores career opportunities in electronic media.	WECM	economic, opportunities, future
RTVB	1320	Introduction to theory and application of lighting for television production. Includes lighting equipment for various production environments, color, angle, intensity, distribution, lighting control scrim, screens and gels.	WECM	environment
RTVB	1425	Basic television production and planning techniques including video, audio and lighting equipment commonly used in a studio.	WECM	planning





RTVB	2282	Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	technology, cooperation
RTVB	2382	Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	technology, cooperation
RTVB	2383	Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	technology, cooperation
RTVB	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events





RTVB	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
RTVB	1392	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
RTVB	1305	Identification and operation of current television production equipment. Includes digital and analog signal concepts and use.	WECM	
RTVB	1329	Writing of commercials, public service announcements, promos, news documentaries, and other broadcast and film materials. Emphasis on the format and style of each type of writing and development of a professional writing style.	WECM	
RTVB	1345	Engineering video productions including the basic alignment/adjustment of cameras, test equipment, storage devices, and other studio equipment. Basic system design and construction. Examines digital standards for broadcast, cable, satellite, and network distribution.	WECM	
RTVB	1347	Audio production theories regarding multitrack recording, studio live production and equipment operation.	WECM	
RTVB	1381	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





RTVB	1409	Concepts and techniques of sound production including basic recording, mixing, and editing techniques.	WECM	
RTVB	1421	Video field camera set up and operation for broadcast and digital media. Incorporates basic editing and field audio techniques.	WECM	
RTVB	2335	Pre-production, production, and post-production process involved in multiple-camera studios. Includes advanced instruction in camera operation, lighting, audio, and television directing.	WECM	
RTVB	2343	Skills in multi-track recording productions for the commercial audio recording industry.	WECM	
RTVB	2370	This general business course for video stresses personnel management, production budgeting, staffing, decision-making, portfolio/resume development, interviewing techniques, site selection, contract law, and copyright management. Use of legal and financial advisors with a variety of business topics related to production companies, use of post houses, professional organizations, taxes, insurance, entrepreneurship, distribution, marketing, and sales will be discussed in depth.	WECM	
RTVB	2430	Film and broadcast editing for the preparation and completion of shorts, trailers, documentaries, and features.	WECM	
RTVB	2437	Design and production of video content for location or studio shoots adhering to deadline and quality control restrictions.	WECM	
RTVB	2455	Producing various projects demonstrating mastery of field and/or studio competence	WECM	





RUSS	1411	This is the first semester of academic transfer Russian. This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented.	ACGM	
RUSS	1412	This is the second semester of academic transfer Russian. This course continues the oral practice, reading, writing, grammar and cultural studies begun in RUSS 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax.	ACGM	
RUSS	2311	This is the third semester of academic transfer Russian. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded.	ACGM	
RUSS	2312	This is the fourth semester of academic transfer Russian. This course is a continuation of RUSS 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture.	ACGM	
SCIT	1308	A continuation of Applied Human Anatomy and Physiology I designed for students considering a career in the health field. The following body systems are included: digestive, respiratory, cardiovascular, lymphatic/immune, renal/excretory, and reproductive. Emphasis is on homeostasis.	WECM	bodily health, reproductive health, reproductive rights





SCIT	1408	A continuation of Applied Human Anatomy and Physiology I designed for students considering a career in the health field. The following body systems are included: digestive, respiratory, cardiovascular, lymphatic/immune, renal/excretory, reproductive, and an expansion of endocrine function. Emphasis is on homeostasis.	WECM	reproductive health, reproductive rights
SCIT	1307	In-depth coverage of the structure and function of the human body. Topics include cell structure and function; tissues; body organization; and the integumentary, skeletal, muscular, nervous, and endocrine systems. Emphasis on homeostasis.	WECM	
SCIT	1407	An applied systematic study of the structure and function of the human body designed for students considering a career in the health field. Includes anatomical terminology, cells, tissues, and the following systems: integumentary, skeletal, muscular, nervous, and endocrine. Emphasis on homeostasis.	WECM	
SCIT	1420	An introduction to physics with emphasis on applications to health related fields of study. Topics include forces, motion, work and energy, fluids, heat, electricity and magnetism, wave motion, sound, electromagnetic radiation, and nuclear radiation.	WECM	
SCWK	2331	An introduction to the literature concerning maladaptive behavior including characteristics, classification, diagnosis, and treatment modalities. Topics include factors associated with defining and identifying abnormal behavior.	WECM	Adaptive





SCWK	2301	Exploration of procedures to identify and evaluate an individual's and/or family's strengths, weaknesses, problems, and needs in order to develop an effective plan of action. Topics include oral and written communications essential for assessment, screening, intervention, prevention, case management, and referral.	WECM	effective, family, basic needs
SCWK	1305	Examination of the various stages of the group work treatment process with emphasis on roles, tasks, and potential problem areas. Topics include mechanics of group function, structure of groups, communication patterns within groups, effective group facilitation skills, and techniques used to address special population issues and needs.	WECM	effective, population
SCWK	2307	A basic framework for creating and organizing knowledge of human behavior and the social environment. Introduction of social system, life span, and strength approaches to understanding human behavior and environment impact. Emphasis on the impact of human diversity, discrimination, and oppression on the individual's ability to reach or maintain optimal health and well-being.	WECM	environment, diversity
SCWK	1313	An overview of the social work profession and introduction to the terms, concepts, people, and critical events that have shaped the profession. Topics include the role of the National Association of Social Workers (NASW) and the Council on Social Work Education (CSWE) in maintaining and strengthening social work education and standards; the importance of human service agencies in fostering or diminishing the quality of services; and developing an understanding of poverty and the impact of institutional racism, sexism, and ageism.	WECM	Institutions, events, association, distribution of wealth, distribution of wealth, poverty, the poor





SCWK	1365	The 336 contact hours must be completed at an approved practicum site. Practical general training and experience in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. Roundtable seminar mandatory.	WECM	pay
SCWK	1321	Introduction to the basic concepts, information, and practices within the field of social services. Topics include a survey of the historical development of social services; social, legal, and clinical definitions, and review of current information regarding indications for and methods of treatment and/ or services.	WECM	
SCWK	2305	Examination of the special needs of youth and their implications for social service workers delivering services to this population.	WECM	
SCWK	2311	An introduction to Major theories of various treatment modalities including client-centered, psychodynamic, rational-emotive, and reality therapy. Topics include cognitive/behavioral approaches such as behavior modification, life skills training, and an introduction to experimental therapies.	WECM	





SGNL	2302	This is the fourth semester of academic transfer American Sign Language (ASL) and a continuation of SGNL 2301. The course aims to further develop students' overall ASL proficiency and knowledge of deaf culture. Emphasized topics include translation between ASL and English and the role and responsibilities of interpreters. In addition, significant attention is devoted to the local deaf community, its organizations, support services and social events. Guest lectures and class outings provide students a forum in which to interact with members of this community.	ACGM	events
SGNL	1301	This is the first semester of academic transfer American Sign Language (ASL). An introduction to the basic skills in production and comprehension of American Sign Language (ASL). Includes finger spelling and numbers. Develops conversational ability, culturally appropriate behaviors and exposes students to ASL grammar.	ACGM	
SGNL	1302	This is the second semester of academic transfer American Sign Language (ASL) and a continuation of SGNL 1301. Develops receptive and expressive ability and allows recognition and demonstration of more sophisticated grammatical features of American Sign Language (ASL). Increases fluency and accuracy in finger spelling and numbers.	ACGM	
SGNL	2301	This is the third semester of academic transfer American Sign Language (ASL). The course is designed to further develop students' ASL proficiency through a review and expansion of vocabulary and grammar and through extensive communicative practice. Sustained attention is given to deaf culture, its values, norms, history, literature, and folklore.	ACGM	





SLNG	2337	Theories and concepts of cross-cultural communication. Explores the impact of culture and language on interpreting multilingual and multicultural situations. Includes strategies for maximizing interpreter and interpreter team effectiveness.	WECM	effective
SLNG	1315	A course in the development of skills in non-verbal communications. Emphasizes the use and understanding of facial expression, gestures, pantomime, and body language. Creation or performance of stories using these elements.	WECM	expression, expression
SLNG	2388	An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience.	WECM	Institutions
SLNG	1405	Develops receptive and expressive ability and allows recognition and demonstration of more sophisticated grammatical features of American Sign Language (ASL). Increases fluency and accuracy in fingerspelling and numbers. Provides opportunities for interaction within the deaf community.	WECM	opportunities
SLNG	1317	An overview of the physical, educational, social and cultural implications of deafness and hearing loss within the context of the individual's personal life, family, and community in today's multicultural world. Emphasis on current educational and vocational programs, legislation, technology, and other issues.	WECM	technology, family, world, loss





SLNG	1347	Provides a historical and contemporary perspective of American deaf culture using a sociocultural mode. Includes cultural identity, values, group norms, communication, language, and significant contributions made by deaf people to the world.	WECM	world
SLNG	1211	Development of expressive and receptive skills in fingerspelling and numbers. Receptive skills focus on whole word phrase recognition and fingerspelling/number comprehension in context. Expressive skills focus on the development of speed, clarity, and fluency.	WECM	
SLNG	1321	Concurrent enrollment SLNG 1445. An overview of the field of sign language interpretation. Provides a historical framework for the principles, ethics, roles, responsibilities, and standard practices of the interpreting profession.	WECM	
SLNG	1404	An introduction to the basic skills in production and comprehension of American Sign Language (ASL). Includes the manual alphabet and numbers. Develops conversational ability, culturally appropriate behaviors, and exposes students to ASL grammar.	WECM	
SLNG	1444	Integrates and refines expressive and receptive skills in American Sign Language (ASL), including recognition of sociolinguistic variation. A practice oriented approach to language acquisition.	WECM	
SLNG	1445	An integration of expressive and receptive skills in American Sign Language (ASL) with emphasis on grammar, linguistics, literature, and discourse styles at an intermediate level. Provides students with information on linguistic and cultural variations.	WECM	





SLNG	2301	An overview of the interpreting process and current models. Introduces the skills necessary to achieve message equivalency in interpreting. This class emphasizes Sign to Voice interpreting.	WECM	
SLNG	2302	Continued development of discourse analysis and interpreting skills for increasingly complex tasks. Utilization of consecutive and simultaneous interpreting scenarios including monologues and dialogues. Emphasizes skill development, self-analysis, and peer evaluation.	WECM	
SLNG	2303	A practice-oriented course designed to develop skills necessary for rendering spoken English to a signed English format and signed English to spoken English.	WECM	
SLNG	2403	A practice-oriented course designed to develop skills necessary for rendering spoken English to a signed English format and signed English to spoken English.	WECM	
SLNG	2411	A focus on interpreting/transliterating with special populations (e.g. deaf/blind, high visual, oral) in special settings (e.g. religious, artistic, medical, legal, mental health). Reinforce basic theories and techniques in relation to the special population(s) and/or settings.	WECM	
SLPS	2330	Cyber theft and computer fraud. Includes physical protection of computers and peripherals.	WECM	
SLPS	2333	The private investigation process. Includes techniques and procedures involved and legal issues applicable to private investigations.	WECM	
SMER	1413	Theory of operation and test procedures and equipment used in the diagnosis and repair of circuits which make up marine electrical systems.	WECM	Air





SMER	1401	Tune up procedures for both two- and four-stroke marine motors including analysis, valve train, ignition, fuel, cooling, and drive systems service. Emphasis is on appropriate equipment and procedures.	WECM	marine acidity, marine debris
SMER	1404	Principles of operation of two- and four-stroke marine engines and associated systems. Emphasis is on troubleshooting and analysis of faulty systems and their individual components.	WECM	marine acidity, marine debris, marine life, marine resources
SMER	1407	Overhaul procedures for two-stroke marine engine overhaul. Emphasis is on proper shop procedures for disassembly, inspection, servicing, and assembly.	WECM	marine debris, marine life, marine resources
SMER	1410	Operation, service, troubleshooting, and overhaul of all Marine Drive systems. Emphasis is on the use of proper tools and procedures when servicing the mid-section, lower unit, trim and tilt systems.	WECM	marine life
SMER	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
SMER	1266	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
SMER	1380	Career related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





SMER	1425	Theory of operation and test procedures and equipment used in the diagnosis and repair of different circuits which make up a small engine electrical system.	WECM
SMER	1428	Principles of operation of small engines and associated systems. Emphasis is on troubleshooting and the analysis of faulty systems and components.	WECM
SMER	1431	Tune up procedures for small engines including analysis, valve train, ignition fuel, starter, cutter, and safety compliance systems. Emphasis is on the use of appropriate equipment and procedures.	WECM
SMER	1434	Overhaul procedures for two-stroke small engines as used in lawn and garden applications. Emphasis is on proper shop procedures for overhaul of two-stroke small engines and their applicable drive systems.	WECM
SMER	1437	Overhaul procedures for four-stroke small engines. Emphasis on shop procedures for overhaul.	WECM
SMER	1438	Theory of operation, troubleshooting, overhaul and service of drive systems found on consumer small engine drive systems.	WECM
SMER	1470	Theory of operation, troubleshooting, overhaul and service of drive systems found on consumer and commercial lawn and garden equipment.	WECM
SMFT	1343	A study of the processes, materials, and equipment used in the manufacturing of semiconductors, including an overview of the semiconductor industry, related terminology, and standard safety practice.	WECM





SOCI	2319	This course studies minority-majority group relations, addressing their historical, cultural, social, economic, and institutional development in the United States. Both sociological and social psychological levels of analysis will be employed to discuss issues including experiences of minority groups within the context of their cultural heritage and tradition, as well as that of the dominant culture. Core concepts to be examined include (but are not limited to) social inequality, dominance/subordination, prejudice, and discrimination. Particular minority groups discussed may include those based on poverty, race/ethnicity, gender, sexual orientation, age, disability, or religion.	ACGM	economic, Institutions, equal, equality, heritages ,disability ,poverty, the poor
SOCI	2326	Study of individual behavior within the social environment. May include topics such as the socio-psychological process, attitude formation and change, interpersonal relations, and group processes.	ACGM	environment
SOCI	1306	Application of sociological principles and theoretical perspectives to major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems.	ACGM	environment, equal, equality, family, substance abuse, inequality, democratic societies, crime, violence
SOCI	2301	Sociological and theoretical analysis of the structures and functions of the family, the varied cultural patterns of the American family, and the relationships that exist among the individuals within the family, as well as the relationships that exist between the family and other institutions in society.	ACGM	Institutions, family





SOCI	1301	The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance.	ACGM	Institutions, gender, democratic societies
SOCI	2389	An instructional program designed to integrate on-campus study with practical hands-on experience in sociology. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions.	ACGM	Institutions, social
SOCI	2336	The course surveys various theories of crime, with an emphasis on understanding the social causes of criminal behavior. The techniques for measuring crime as a social phenomenon and the characteristics of criminals are examined. This course addresses crime types (such as consensual or white-collar crimes), the criminal justice system, and other social responses to crime.	ACGM	Justice, crime
SOCI	2306	This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives – biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her own decision-making on sexual issues outside of the classroom.	ACGM	





SOCI	2340	Study of the use and abuse of drugs in today's society. Emphasizes the physiological, sociological, and psychological factors.	ACGM	
SPAN	2315	This semester course focuses on the development of writing and oral communication skills, including practice in: 1) describing story characters, real persons, animals and natural phenomena; 2) summarizing facts and ideas; 3) giving oral information, instruction, directions, explanations and messages; 4) writing original compositions in Spanish and translating from English into Spanish; 5) reading and discussing well-known Spanish and Hispanic-American historical figures, writers, artists and musicians; 6) gaining a more advanced understanding of the Hispanic culture.	ACGM	cruelty to animals
SPAN	1300	Basic practice in comprehension and production of the spoken language. Emphasis on oral communication with an introduction of basic grammatical concepts and the development of reading and vocabulary skills. Cultural topics will be discussed.	ACGM	
SPAN	1311	This is the first semester of academic transfer Spanish. It is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented.	ACGM	





SPAN	1411	This is the first semester of academic transfer Spanish. This course is an introductory course intended for students with little or no knowledge of the language. Its aim is to present essential vocabulary and grammar, and to develop the pronunciation, listening, reading, and writing skills necessary for basic communication and comprehension. Customs and cultural insights are also presented.	ACGM	
SPAN	1412	This is the second semester of academic transfer Spanish. This course continues the oral practice, reading, writing, grammar and cultural studies begun in SPAN 1411. Students are expected to acquire a substantial amount of vocabulary and begin to deal with idiomatic language and more advanced syntax.	ACGM	
SPAN	2311	This is the third semester of academic transfer Spanish. This course is designed to further develop students' overall language proficiency and cultural knowledge through more advanced reading, listening, speaking and writing exercises. Grammatical concepts are reviewed and expanded.	ACGM	
SPAN	2312	This is the fourth semester of academic transfer Spanish. This course is a continuation of SPAN 2311. The stress is on reading, composition, grammatical complexities, and intense oral practice, with continued studies of the culture.	ACGM	





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SPAN	2313	This is the third semester of academic transfer of Spanish. This course focuses on and emphasizes the development of: 1) the student's ability to communicate ideas and feelings, both orally and in writing; 2) comprehension skills through the study of reading selections; 3) the study of Spanish speaking countries and their culture(s); and 4) identification of regional variations of Spanish. Such study will lead to the analysis of content, style and sentence structure from contemporary Spanish reading selections.	ACGM	
SPCH	2335	Public discussion and argumentation are studied. Both theories and techniques are covered. Emphasis is on evaluation, analysis, and logical thinking.	ACGM	dissent
SPCH	1315	An introductory course to develop the student's skills, knowledge, and understanding of the public speaking process. Topics include the principles of reasoning, audience analysis, collection of materials, outlining, and delivery. Emphasis is on the oral presentation of well-prepared speeches, using computer technology when appropriate.	ACGM	technology
SPCH	1311	Theory and practice of speech communication behavior in one-to-one, small group, and public communication situations are introduced. Students learn more about themselves, improve skills in communicating with others, and prepare and deliver formal public speeches.	ACGM	
SPCH	1318	This course presents theories and exercises in verbal and nonverbal communication with focus on interpersonal relationships.	ACGM	
SPCH	1321	Theories and skills of speech communication as applied to business and professional situations will be studied.	ACGM	





SPCH	1342	The mechanics of speech are studied. Emphasis is on improving voice and pronunciation.	ACGM	
SPCH	2333	This course is designed to develop skills in leading and participating in various forms of discussion groups. Special emphasis is placed upon factors influencing communication in groups such as listening, roles, decision-making, and problem-solving.	ACGM	
SPCH	2341	Various types of literature are examined. Practice is provided in preparing and presenting selections orally. Emphasis is on individual improvement.	ACGM	
SPCH	2389	This instructional program is designed to integrate on- campus study with practical hands-on work experience. In conjunction with class seminars, the student will set specific goals and objectives in the study of Communication.	ACGM	
SRGT	1343	Expansion of the principles and skills learned in Perioperative Nursing I. Included are specific patient preparations and care for given surgical procedures; wound healing; complications of surgical interventions; and preand post-operative visits. Selected surgical procedures will incorporate all human body systems. The circulating role is emphasized.	WECM	bodily health, systems
SRGT	1441	Introduction to surgical procedures and related pathologies. With emphasis on surgical procedures related to general, obstetrics/gynecology, genitourinary, otorhinolaryngology and orthopedic surgical specialties incorporating instruments, equipment, and supplies. Scrub and circulating roles are emphasized.	WECM	Ecology





SRGT	2130	Exploration of issues and situations faced as surgical technologists. Topics may include job-seeking skills and written professional portfolios, pros/cons of malpractice insurance, reality shock of employment, coping with issues of death and dying, organ procurement issues, and preparation for national certification. A capstone experience may be included.	WECM	employment, decent work
SRGT	1361	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable, technology
SRGT	2362	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable, technology
SRGT	1340	Introduction of the registered nurse or new graduate nurse to the operating room environment. The intraoperative aspect of perioperative nursing is emphasized. Included are basic principles of sterile technique, sterilization, preparation, care and use of surgical instruments, supplies and equipment; ethical/legal implications; surgical pharmacology and anesthetic agents; basic care and safety of the patient in the operating room. The scrub role is emphasized.	WECM	environment, ethical
SRGT	1367	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	technology
SRGT	1505	Orientation to surgical technology theory, surgical pharmacology and anesthesia, technological sciences, and patient care concepts.	WECM	technology





SRGT	1541	Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the general, OB/GYN, genitourinary, and orthopedic surgical specialties incorporating instruments, equipment, and supplies required for safe patient care.	WECM	technology
SRGT	1542	Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the thoracic, peripheral vascular, plastic/reconstructive, EENT, cardiac, and neurological surgical specialties incorporating instruments, equipment, and supplies required for safe patient care.	WECM	technology
SRGT	1167	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
SRGT	1509	In-depth coverage of perioperative concepts such as aseptic principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field.	WECM	
SRGT	2366	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
SRVY	2343	The study of location, conveyance, ownership and transfer of real property under the laws of the State of Texas. Emphasis on the history of disposition of public land, interpreting written descriptions, dignity of calls and evidence, record search of public and private land records and preparation of a deed record sketch.	WECM	land consumption, material consumption
SRVY	2335	Emphasis on the field techniques of making astronomic observations, recovering control monuments, setting control monuments, and the planning and use of Global Positioning System receivers in data collection.	WECM	planning





SRVY	1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
SRVY	1301	An overview of the surveying profession. The history of surveying and its impact on the world. Review of the mathematics used in surveying. Introduction to basic surveying equipment with emphasis on measurements. Instruction on surveying procedures and the limitation of errors. Calculation to determine precision and error of closure.	WECM	world
SRVY	1309	An introductory course covering the equipment and hardware of the profession necessary to measure horizontal and vertical distances, in accordance with prevailing and applicable professional standards, e.g. standards of the National Geodetic Survey, state and local statues and regulations, professional standards, such as the Texas Society of Professional Surveyors.	WECM	
SRVY	1313	An introductory overview of surveying equipment and measurement techniques with emphasis on leveling and traversing.	WECM	
SRVY	1315	An introduction to the mathematics used in surveying and mapping, including algebra, plane trigonometry, and plane, solid, and analytical geometry.	WECM	
SRVY	1335	A lab course covering the equipment, techniques and hardware of the profession necessary to measure horizontal and vertical angles and distances used in traversing, according to prevailing and applicable professional standards.	WECM	





SRVY	1341	A study of the measurement and determination of boundaries, areas, shapes, location through traversing techniques. Instruction in a variety of adjustment methods using programmed and non-programmed hand-held calculators and computers. Methods of traversing and adjustment of errors according to prevailing and applicable professional standards.	WECM	
SRVY	2305	A hands-on course with computer applications providing additional conceptual understanding of geographic information systems and practical applications using a variety of Geographic Information System software.	WECM	
SRVY	2331	A study of field astronomy, Polaris and solar observations, State Plane Coordinate Systems, and Global Positioning System.	WECM	
SRVY	2341	The companion lab for Engineering Design Surveying. Emphasis on field methods of surveying alignments.	WECM	
SRVY	2344	An advanced course in legal principles, retracement and boundary location with application of legal principles and Rules of Construction; writing survey reports and property descriptions; and a review of boundary law cases.	WECM	
TECA	1354	A study of the physical, emotional, social, language, and cognitive factors impacting growth and development of children through adolescence. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices.	ACGM	association





TECA	1311	An introduction to the education of the young child, including developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities, and current issues. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations; and the course includes a minimum of 16 hours of field experiences.	ACGM	ethical, association
TECA	1303	A study of the child, family, community and school, including parent education and involvement, family and community lifestyles, child abuse, and current family life issues. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. The course includes a minimum of 16 hours of field experiences.	ACGM	family, association





TECA	1318	A study of the factors that impact the well-being of the young child including healthy behavior, food, nutrition, fitness, and safety practices. Focuses on local and national standards and legal implications of relevant policies and regulations. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth to age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. Course includes a minimum of 16 hours of field experiences.	ACGM	
TECM	1349	Trigonometry and geometry as used in a variety of technical	WECM	Food, association, malnutrition
		settings. Includes the use of plane and solid geometry to solve areas and volumes encountered in industry.		solid
TECM	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
TECM	1303	Specific mathematical calculations required by business and industry. Includes whole numbers, fractions, mixed numbers, decimals, percents, ratios, and proportions. Also covers converting to different units of measure (standard and/or metric).	WECM	
TECM	1317	Triangular measurements and calculations used in industrial applications. Includes trigonometry ratios, solution of right triangles, oblique triangles, and vector analysis.	WECM	





TECM	1341	Application of linear equations, simultaneous equations, and quadratic equations relevant to technical occupations.	WECM	
TECM	1403	Specific mathematical calculations required by business and industry. Includes whole numbers, fractions, mixed numbers, decimals, percents, ratios, and proportions. Also covers converting to different units of measure (standard and/or metric).	WECM	
TRVM	1308	Study of countries located in the Western Hemisphere including Canada, United States, Latin America, South America, and the Caribbean Islands. Emphasis on the culture, customs, seasonal attractions, climate, physical features, language, currency, political conditions, and how they affect both the business and leisure traveler.	WECM	climate change, climate-related, developing countries, least developed countries
TRVM	1341	Study of countries located in the Eastern Hemisphere including Europe, Asia, Africa, Middle East, Australia, and New Zealand. Emphasis on the culture, customs, climate, physical features, language, currency, and political conditions and how they affect both the business and leisure traveler.	WECM	climate change, climate-related, developing countries, least developed countries
TRVM	2380	Career related activities encountered in the student's area of specialization are offered though a cooperative agreement between college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through paid work experience.	WECM	cooperation





TRVM	2331	Application of general legal principles and statutory requirements to meetings, conventions and trade shows. Emphasis on ethical considerations to problems faced by meeting planners, hotels, and convention centers in the negotiation and implementation of agreements for meetings and similar events.	WECM	ethical, events, planning
TRVM	2355	A discussion of management of the specific problems of trade shows and exhibitions, including design, construction, and regulation. Includes logistics for planning events such as crowd control, special effects, lighting, decorations and audio.	WECM	events, planning
TRVM	1331	An exploration of the hospitality/lodging industry with emphasis on its history and development with relationships between hotel/lodging and suppliers. Explain the elements of the hospitality industry including food and beverage, housing, reservations, and convention services. Define the responsibilities of key executives and interpret a hotel organizational chart.	WECM	Housing, Food
TRVM	2301	Overview of the meetings and conventions industry and the various aspects and skills involved in planning and managing meetings and conventions. Emphasis on types of meetings, meeting markets, industry suppliers, budget and program planning, site selection and contract negotiations, registration and housing, food and beverage requirements, functions and meeting room setup, and audiovisual requirements.	WECM	Housing, planning, Food





TRVM	2333	Practical application of meetings and exposition skills through a case study or participation in a conference/meeting. Includes integration of meeting planning tools that compare and discriminate between key areas of program development and convention objectives.	WECM	Participation, planning
TRVM	1323	A study of the role of the group planner, selling to groups, and planning itineraries, including components of a tour package, tour costing, advertising, and promotion, group dynamics, and tour guide qualifications.	WECM	planning
TRVM	1327	The development of a special event from the conceptual stage through completion. Emphasis on industry terminology, factors to consider when planning a special event, and contingency plans.	WECM	planning
TRVM	1345	A study of marketing, sales techniques, promotions, and advertising theories as applied to the travel and tourism industry. Coverage of the marketing mix in travel, market segmentation, market planning, and the use of advertising and other communication techniques. Emphasis on buyer motivation, telephone sales techniques, profitable travel counseling, and the use of promotional material in selling travel.	WECM	planning
TRVM	2300	Overview of software products used to assist the industry professional in the fields of travel and tourism, meetings and hospitality.	WECM	planning





TRVM	2341	Apply the principles of convention/meeting management in an international setting. Compare the differences in planning a domestic versus an international meeting; including contract negotiation, foreign currency, customs and laws, exposition, marketing, shipping, languages, cultures, and how foreign policy affects the meeting planning process. Identify resources to assist planner in development of an international meeting.	WECM	planning, disparities
TRVM	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
TRVM	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
TRVM	1391	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
TRVM	1491	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
TRVM	1101	Practical information and techniques to create excellent customer sale and service unique to the travel public.	WECM	
TRVM	1117	Current issues and trends related to the cruise industry. Includes a discussion of the many types of cruise lines and the reasons for the popularity of this mode of travel.	WECM	
TRVM	1201	Practical information and techniques to create excellent customer sales and service unique to the travel public.	WECM	





TRVM	1280	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
TRVM	1300	An overview of the travel and tourism industry. Emphasis on travel careers and the impact of tourism on society.	WECM	
TRVM	1302	Establishing a home based travel business.	WECM	
TRVM	1325	A broad-based introduction to the principles and skills required for the management of expositions. Examination of the fundamental business philosophy of expositions and their position in the marketplace. An overview of the major issues in exposition management including needs assessment, budget strategies, site selection, floor plan development, contractor relationships, sales and marketing and related management issues.	WECM	
TRVM	2480	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
VIRT	1310	Introduction to the diagnostic procedures used in the interventional lab including patient preparation and monitoring, angiographic equipment set-up, and vascular procedures.	WECM	





VIRT	1320	This course prepares the student for the operation of interventional radiology equipment, focusing on routine protocols, basic principles, theory, electronics, and instrumentation.	WECM	
VIRT	2164	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
VIRT	2265	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	
VIRT	2310	Continuation of VIRT 1310, Principles of Interventional Radiology I. Continuing coverage of interventional radiology imaging techniques, focusing on more advanced angiographic procedures. Image quality assurance and radiation protection are emphasized.	WECM	
VIRT	2330	Exploration of advanced interventional radiology procedures and emerging applications.	WECM	
VIRT	2340	Study of advanced and independent patient care skills, to include management of tubes and lines, advanced pharmacology interactions, and evaluation of the overall pathophysiological process of the patient.	WECM	
VIRT	2364	Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.	WECM	





VNSG	1360	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Application of a systematic problem solving approach utilizing the nursing process and critical thinking skills to provide safe, competent, compassionate nursing care to the culturally, ethically, and socially diverse adult patient with predictable health care needs. Direct supervision is provided by the clinical professional.	WECM	enable, ethical
VNSG	2163	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Continued application of a systematic problem solving approach utilizing the nursing process and critical thinking skills to provide safe, competent, compassionate nursing care to culturally, ethically, and socially diverse adult patients. Focus in on the integration of the role of the vocational nurse as a provider of patient-centered care, patient safety advocate, member of the health care team, and member of the profession within a legal/ethical framework while providing individualized, goal directed nursing care to multiple patients with predictable health care needs. Direct supervision is provided by the clinical professional.	WECM	enable, ethical





				10 100
VNSG	2460	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Application of a systematic problem solving approach utilizing the nursing process and critical thinking skills to provide safe, competent, compassionate nursing care to culturally, ethically, and socially diverse adult patients. Focus is on the use of clinical reasoning and evidence based policies in the care of multiple patients with predictable health care needs providing individualized, goal directed nursing care. Direct supervision is provided by the clinical professional.	WECM	enable, ethical
VNSG	2162	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Application of a systematic problem solving approach utilizing the nursing process and critical thinking skills to provide safe, competent, compassionate nursing care to the culturally, ethically, and socially diverse pediatric patient and their family. Direct supervision is provided by the clinical professional.	WECM	enable, ethical, family
VNSG	2161	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Application of a systematic problem solving approach utilizing the nursing process and critical thinking skills to provide safe, competent, compassionate nursing care to the culturally, ethically, and socially diverse maternal and newborn patient. Direct supervision is provided by the clinical professional.	WECM	enable, ethical, maternal mortality, mortality rate





VNSG	1509	Introduction to health problems requiring medical and surgical interventions. Application of a systematic problem solving approach utilizing the nursing process, critical thinking skills and evidence-based policies to provide nursing care to culturally, ethically and socially diverse adult patients with predictable health care problems and needs.	WECM	ethical
VNSG	2510	Continuation of Nursing in Health and Illness II. Further study of medical-surgical health problems of the patient including concepts of mental illness. Incorporates knowledge necessary to make the transition from student to graduate vocational nurse. Continued application of a systematic problem solving approach utilizing the nursing process, critical thinking skills along with evidence-based policies to provide nursing care to culturally, ethically and socially diverse adult patients with predictable health care needs.	WECM	ethical
VNSG	1327	General principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs. Instruction includes various systems of measurement. Focus is on providing safe, competent pharmacotherapeutic care to culturally, ethically, and socially diverse patients with predictable health care needs.	WECM	ethical, basic needs





VNSG	1204	Introduction to the nursing profession including history, standards of practice, legal and ethical issues, and role of the vocational nurse. Topics include mental health, therapeutic communication, cultural and spiritual diversity, nursing process, and holistic awareness. This course introduces the role of the vocational nurse as a provider of patient-centered care, patient safety advocate, member of the health care team, and member of the profession within a legal/ethical framework.	WECM	ethical, diversity, moral and spiritual education
VNSG	1330	A study of the biological, psychological, and sociological concepts applicable to basic needs of the family including childbearing and neonatal care. Utilization of the nursing process in the assessment and management of the childbearing family. Topics include physiological changes related to pregnancy, fetal development, and nursing care of the family during labor and delivery and the puerperium. Application of a systematic problem solving approach utilizing the nursing process and critical thinking skills to provide safe, competent, compassionate nursing care to the culturally, ethically, and socially diverse child bearing family.	WECM	ethical, family, basic needs
VNSG	1334	Study of the care of the pediatric patient and family during health and disease. Emphasis on growth and developmental needs utilizing the nursing process. Application of a systematic problem solving approach utilizing the nursing process and critical thinking skills to provide safe, competent, compassionate nursing care to the culturally, ethically, and socially diverse pediatric patient and their family.	WECM	ethical, family, basic needs





VNSG	1138	Study of human behavior with emphasis on emotional and mental abnormalities and modes of treatment incorporating the nursing process. Focuses on application of a systematic problem solving approach utilizing the nursing process, critical thinking skills and evidence-based policies to provide safe, competent, compassionate care to the individual with mental health problems.	WECM	
VNSG	1227	General principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs. Instruction includes various systems of measurement.	WECM	
VNSG	1323	Mastery of basic nursing skills and competencies for a variety of health care settings using the nursing process as the foundation for all nursing interventions.	WECM	
VTHT	1413	Gross anatomy of domestic animals including physiological explanations of how each organ system functions. The student will describe the major anatomical systems of domestic animals and integrate basic physiological processes with anatomical structures of domestic animals.	WECM	cruelty to animals
VTHT	2325	Study of restraint and proper management, treatment, and medication techniques for farm animals. The student will perform restraint of farm animals; demonstrate proper treatment and medication techniques; and identify common diseases and management techniques for farm animals.	WECM	cruelty to animals





VTHT	1321	Introduction to common reproductive management techniques of equine reproduction including natural and artificial insemination. Emphasis on practical reproductive techniques in laboratory settings. The student will describe mare and stallion reproductive anatomy and physiology; perform handling techniques for and management of brood mares and stallions; and implement artificial insemination and natural breeding programs.	WECM	cruelty to animals, local breeds, reproductive health, reproductive rights	
VTHT	2380	Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the particular occupation and the business/industry; demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, communicating in the applicable technical language of the occupation and the business or industry.	WECM	economic, environment, ethical, cooperation, democracy	
VTHT	1160	A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.	WECM	enable	





VTHT	1349	Fundamentals of pharmacology including recognition, calculation, labeling, packaging, and administration of common veterinary drugs, biologics, and therapeutic agents. Discussion of normal and abnormal responses to these agents. The student will identify general types and groups of drugs; prepare, label, package, and dispense pharmaceuticals in an ethical/legal manner; calculate dosages using proper weights, units, and measures; explain and use appropriate routes and methods of drug administration; and differentiate between normal and abnormal responses to medication.	WECM	ethical
VTHT	1345	Presentation of theory and principles and practical application of radiology within the field of veterinary medicine. The student will implement and follow recommended safety procedures; prepare and use technique charts; take and process diagnostic radiographs using stationary and portable X-ray machines; properly care for radiographic equipment; and label, file, and store radiographs.	WECM	Medicine
VTHT	2217	Survey of feeding, common management practices, and care of exotic animals in a clinical or zoological setting. Review of common diseases of exotic animals encountered in the practice of veterinary medicine. The student will implement appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; apply knowledge of nutrition, reproduction, and behavior of exotic animals in a clinical setting; and recognize common disease pathophysiology.	WECM	Medicine, cruelty to animals





VTHT	2213	Survey of feeding, management practices, and care of laboratory animals in a clinical setting. Review of common diseases of laboratory animals encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; implement knowledge of nutrition, reproduction, and behavior of laboratory animals in a clinical setting; and recognize common disease pathophysiology.	WECM	Medicine, cruelty to animals, degradation	
VTHT	2201	Survey of feeding, common management practices, and care of canines and felines in a clinical setting. Review of common diseases of canines and felines encountered in the practice of veterinary medicine. The student will apply sanitation and disease prevention techniques; utilize medication procedures; implement nutrition, reproduction, and behavior concepts of canines and felines in a clinical setting; and differentiate between common disease pathophysiology.	WECM	Medicine, technology, communicable diseases	
VTHT	2205	Survey of feeding, common management practices, and care of equines in a clinical setting. Review of common diseases of equines encountered in the practice of veterinary medicine. The student will demonstrate sanitation and disease prevention techniques; perform medication procedures; and implement nutritional, behavioral, and reproductive concepts in an equine clinical setting.	WECM	Medicine, technology, communicable diseases	





VTHT	2209	Survey of feeding, common management practices, and care of food producing animals in a clinical setting. Review of common diseases of food producing animals encountered in the practice of veterinary medicine. The student will demonstrate sanitation and disease prevention techniques; utilize medication procedures; implement principles of nutrition, reproduction, and behavior of food producing animals in a clinical setting; and differentiate between common disease pathophysiologies.	WECM	Medicine, technology, Food, cruelty to animals	
VTHT	2439	Capstone course requiring integration of course work in the field of veterinary technology. The student will apply surgical and anesthesia principles with emphasis on pharmacological care; and demonstrate competencies expected of an entry-level credentialed veterinary technician.	WECM	technology	
VTHT	2321	Study of parasites common to domestic animals including zoonotic diseases. The student will identify internal and external parasites and parasites of public health importance; and apply knowledge of basic life cycles to the study of parasites.	WECM	technology, cruelty to animals	
VTHT	1217	Practical experience in management of the veterinary practice. Emphasis on client relations, record keeping, inventory, employment skills, and computer skills in the veterinary environment. The student will employ client and veterinary team communication; apply basic business principles such as the maintenance of medical records and computer skills; and demonstrate employment skills including interviewing, resume writing, and appropriate interview attire.	WECM	technology, environment, employment	





VTHT	1301	Survey of the profession of veterinary technology with emphasis on basic techniques, handling and care of animals, and ethical and professional requirements. The student will demonstrate basic restraint, medication, and treatment techniques for domestic animals; identify breeds of animals; and define the responsibilities of a veterinary assistant or technician in a veterinary practice including physical exams, basic care, feeding, sanitation, public and/or client relations; and identify ethical and legal issues.	WECM	technology, ethical, cruelty to animals, local breeds
VTHT	1341	In-depth application of surgical, obstetrical, and anesthesia techniques including identification and use of instruments and equipment. The student will identify instruments used in veterinary surgery; demonstrate operating room etiquette and the use of sterile technique; perform preanesthesia evaluation, administer and monitor anesthesia, and provide post-anesthesia care; recognize and respond appropriately to anesthetic emergencies; and assist with routine surgical and obstetrical procedures.	WECM	
VTHT	2223	In-depth study of hematology and blood chemistries with emphasis on lab procedures. Perform complete blood counts (CBCs); differentiate normal from abnormal blood components; perform blood chemistries; and utilize diagnostic equipment.	WECM	
VTHT	2280	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	





VTHT	2331	In-depth study of urinalysis and cytology. Survey of microbiological techniques. Emphasis on laboratory procedures. The student will perform urinalysis, cytological, and basic microbiological techniques; and utilize diagnostic equipment.	WECM
WDWK	1313	Design and construction of base cabinets and wall cabinets for kitchens and bathrooms. Emphasis on the safe use of portable and stationary power tools. Finishing techniques include proper sanding, sealing, and staining.	WECM
WDWK	1370	This course covers a variety projects that will be determined by the student and instructor at the beginning of the class. A study of new methods and materials, tools and equipment will also be included. Emphasis on safety during lab work.	WECM
WDWK	2331	Techniques of furniture making. Identify the different types of furniture construction; construct doors and drawers; apply joints and construction techniques; identify different materials used for furniture construction; demonstrate safe use of portable and stationary power tools; develop a furniture design; and lay out, cut, and assemble components.	WECM
WDWK	2351	Advanced skills in machine woodworking and hand craftsmanship. Emphasizes advanced design and door and drawer construction, laminate laying, and customer and coworkers relations.	WECM
WDWK	2451	Advanced skills in machine woodworking and hand craftsmanship. Emphasizes advanced design and door and drawer construction, laminate laying, and customer and coworkers relations. Lab required.	WECM





WIND	2359	Components, equipment, and infrastructure used in the production and transmission of electricity as related to wind turbine power.	WECM	
WIND	2410	Identification and analysis of the components and systems of wind turbine.	WECM	
WLDG	1471	Topics covered will include interpretation of applicable welding specifications, electrode use, current/polarity characteristics, performing a wide range of welding operations, weld quality analysis, welding supplies/materials conservation practices, and operational safety practices.	WECM	conservation
WLDG	1381	Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.	WECM	cooperation
WLDG	1425	An introduction to oxy-fuel welding and cutting, including history and future in welding, safety, setup and maintenance of oxy-fuel welding, and cutting equipment and supplies.	WECM	future
WLDG	1191	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events
WLDG	1291	Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.	WECM	technology, events





WLDG	1200	Equipment used in oxy-fuel and arc welding. Includes cutting of ferrous metals. Emphasizes welding and cutting safety and basic welding processes.	WECM
WLDG	1307	Basic welding processes. Includes oxy-fuel welding (OFW) and cutting, shielded metal arc welding (SMAW), gas metal arc (GMAW), and gas tungsten arc welding (GTAW).	WECM
WLDG	1317	A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction.	WECM
WLDG	1323	An introduction to welding careers and safety practice, including welding safety; OSHA and the Hazardous Communication Act; Material Safety Data Sheets (MSDS); basic mathematics; measuring systems; shop operations; use and care of precision measuring tools; and the use and care of hand and power tools. Instruction on various types of welding equipment and processes, basic welding gases, fluxes, rods, electrodes, symbols, and blueprints. Lab required.	WECM
WLDG	1337	A study of ferrous and nonferrous metals from the ore to the finished product. Emphasis on metal alloys, heat treating, hard surfacing, welding techniques, forging, foundry processes, and mechanical properties of metal including hardness, machinability, and ductility.	WECM
WLDG	1428	An introduction to shielded metal arc welding process. Emphasis placed on power sources, electrode selection, oxy-fuel cutting, and various joint designs. Instruction provided in SMAW fillet welds in various positions.	WECM
WLDG	1430	A study of the principles of gas metal arc welding, setup and use of GMAW equipment, and safe use of tools/equipment. Instruction in various joint designs.	WECM





WLDG	1434	An introduction to the principles of gas tungsten arc welding (GTAW), setup/use of GTAW equipment, and safe use of tools and equipment. Welding instruction in various positions on joint designs.	WECM	
WLDG	1435	An introduction to welding of pipe using the shielded metal arc welding process (SMAW), including electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 1G and 2G using various electrodes. Lab required.	WECM	
WLDG	1457	A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions.	WECM	
WLDG	1480	Career-related activities encountered in the student's area of specialization offered through and individualized agreement among the college, employer, and student. Under the supervision of the college and employer, the student combines classroom learning with work experience. Includes a lecture component.	WECM	
WLDG	2413	Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shield metal arc welding, gas metal arc welding, flux-cored arc welding, gas tungsten arc welding, or any other approved welding process.	WECM	
WLDG	2443	Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joints in all positions.	WECM	
WLDG	2447	Advanced topics in GMAW welding, including welding in various positions and directions.	WECM	





WLDG	2451	Advanced topics in GTAW welding, including welding in	WECM
		various positions and directions.	