

Introduction

This course inventory was developed for Colorado State University's STARS 2.2 submission following the STARS 2.2 definition for sustainability courses and courses that include sustainability.

Methodology

The 2021 – 2022 courses were collected using a survey developed by the CSU Institute for Research in the Social Sciences (IRISS), the Provost's Office, and the President's Sustainability Commission's Academic and Research Subcommittee. The survey was sent out to all faculty at CSU from the CSU Interim President and Provost. Definitions of sustainability courses were defined by the STARS 2.2 Technical Manual (see definitions below).

IRISS invited all instructors who taught courses at Colorado State University between Spring 2020 and Spring 2022 to participate in the survey. IRISS received this data from CSU Institutional Research and sent out individual invitations to instructor's CSU emails. To make participation easier, all courses the instructor taught in the above-mentioned timeframe were loaded automatically into the survey so instructors could indicate which courses met one of the two criteria. Courses reported for the 2021-2022 academic year were reviewed by the CSU STARS Team for inclusion in this report to ensure they met the criteria.

Instructors received their first invitation to participate in the survey on July 14, 2022. Those who didn't respond received a reminder on July 25, 2022, with a final reminder on August 3, 2022. Survey questions assessed whether the instructor's courses included sustainability content and to what extent the course content focused on environmental, social, and/or economic sustainability. The survey also inquired about how sustainability was integrated into the course (i.e., lecture, assignment, lab, service learning, etc.).

Our inventory covers one academic year (2021-2022), and all courses were counted once, regardless of the number of sections or number of times the course was offered during the academic year.

Definitions

Sustainability Courses:

To count as sustainability-focused, the course title or description must indicate a primary and explicit focus on sustainability. This includes:

- A. Foundational courses with a primary and explicit focus on sustainability (e.g., Introduction to Sustainability, Sustainable Development, Sustainability Science).
- B. Courses with a primary and explicit focus on the application of sustainability within a field (e.g., Architecture for Sustainability, Green Chemistry, Sustainable Agriculture, Sustainable Business). As sustainability is an interdisciplinary topic, such courses generally incorporate insights from multiple disciplines.
- C. Courses with a primary and explicit focus on a major sustainability challenge (e.g., Climate Change Science, Environmental Justice, Global Poverty and Development, Renewable Energy Policy). The focus of such courses might be on providing knowledge and understanding of the problems and/or the tools for solving them.

Courses that include Sustainability:

Courses that are not explicitly focused on sustainability may contribute towards scoring if sustainability has clearly been incorporated into course content. To count as sustainability-inclusive, the course description or rationale provided in the course inventory must indicate that the course incorporates a unit or module on sustainability or a sustainability challenge, includes one or more sustainability-focused activities, or integrates sustainability challenges, issues, and concepts throughout the course.

Undergraduate Sustaina		1		Enviromental	Environmental			Economic	Economic	
Department	Course #	Course Name	Course Description	Focused	Inclusive	Social Focused	Social Inclusive	Focused	Inclusive	How Sustainability Concepts are Integrated
			Synthesize multifaceted information across a wide range of disciplines, with the goal to develop potential solutions to complex human-societal-environmental challenges at multiple scales. Implement methods for understanding current issues, develop alternative scenarios to current practices and policies,							Lecture(s),Guest speaker(s),Assignments(s)/Graded
Ecosystem Science &			and stage interventions to achieve more sustainable behaviors							Deliverable(s),Readings/Video/Podcast,Module or
Sustainability	ESS 312	Sustainability Science	and practices.	Yes		Yes		Yes		Unit,Lab(s),Discussion/Recitation
Ecosystem Science & Sustainability	ESS 353	Global Change Impacts, Adaptation, Mitigation	Explore challenges of climate change for mountain environments and society and their solutions.	Yes		Yes			Yes	
Ecosystem Science & Sustainability	ESS 365	Global Climate Justice	Explore how mechanisms of environmental transport (air, water, land, biota) act as drivers within different ecosystems and how such drivers create pathways that lead to climate justice issues among the world's vulnerable populations.							
Sustamability	E33 303	Global Climate Justice		Yes		Yes			Yes	
Ecosystem Science & Sustainability	ESS 400	Global Perspectives on Sustainability	Explores the intersections between ecosystem science, communities and sustainability in the context of the global challenges of climate change focusing on the new global framework (The Paris Agreement), Sustainable Development Goals (SDGs), and ecological indicators.	Yes		Yes			Yes	
Ecosystem Science & Sustainability	ESS 401	Sustainability of Parks & Protected Places	Explore connections between culture, sustainability, and park management topics while discussing people, parks, and places through the lens of diversity and inclusion in natural resources.	Yes		Yes			Yes	
Ecosystem Science &		Global Agriculture and	Explore the past, present, and future of global agroecosystems in a changing environment. Examine a range of environmental issues facing agroecosystems around the world, including water management, climate change, air pollution, and land use change. Assess the history of agricultural development and the factors that determine food security, as well as what strategies could							
Sustainability	ESS 405	Environmental Change	help create a more sustainable and food secure world.	Yes		Yes			Yes	
Ecosystem Science & Sustainability	ESS 440	Practicing Sustainability	Capstone integration of ecosystem science and sustainability, focused on case studies.	Yes		Yes				
Ecosystem Science &		,	One-week field practicum to examine ecosystem science and							
Sustainability	ESS 486	Ecosystem Practicum	sustainability issues in Colorado landscapes.	Yes		Yes				
School of Global Environmental Sustainability	GES 101	Foundations of Environmental Sustainbility	Concepts, foundations, and metrics of global environmental sustainability applied to global challenges.	Yes		Yes		Yes		Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service
School of Global Environmental Sustainability	GES 130	Introduction to Sustainability Engagement	Introduction to sustainability engagement via experiential learning.	Yes		Yes		Yes		Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation, Service Learning/Community Service
School of Global Environmental Sustainability	GES 135	Applied Community Sustainability	Engaging with communities on real projects, teams of students develop workable solutions to problems related to food security, green infrastructure, urban wildlife conservation, and other sustainability topics. This course will be fully integrated with a writing course providing a complementary emphasis on values, ethics, meaning, critical thinking, writing, and speaking.	Yes		Yes		Yes		
			Fossil, nuclear, and renewable energy sources. Energy	1		_				
School of Global Environmental Sustainability	GES 141	Introduction to Sustainable Energy	conversion, distribution, and storage. Energy and the environment. Energy economics and policy.	Yes			Yes	Yes		
School of Global Environmental Sustainability	GES 330A		Engages students in real-world sustainability applications and empowers them to design and execute their own program or research project. A) Project. B) Service Learning.	Yes						Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation, Other (please describe): Independent project

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School of Global Environmental Sustainability	GES 330B	Sustainability in Practice -Service Learning	Engages students in real-world sustainability applications and empowers them to design and execute their own program or research project. A) Project. B) Service Learning.	Yes		Yes		Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service
School of Global Environmental Sustainability	GES 380A2	Anthropocene Systems Thinking	Senior-level experimental course building competence in systems thinking. Core activities include using quantitative and qualitative modeling, exploring the history of systems analysis in sustainability, and deepening the understanding of the Anthropocene and what it means for systems change.	Yes		Yes		Yes		Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Lab(s), Discussion/Recitation
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School of Global Environmental Sustainability	GES 440	Sea Level Rise	Overview of sea level rise (SLR), with lectures on basic geophysics of SLR, the projected future impacts from climate models, and uncertainty around these projections. Impacts of SLR are discussed in a historical, present, and future context, focusing on social, cultural, economic, and political dimensions.	Yes		Yes		Yes		Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Lab(s), Discussion/Recitation
			Methods of evaluating sustainable energy technologies, including							
School of Global Environmental		Analysis of Sustainable Energy	life cycle assessment, energy return on investment,							
Sustainability	GES 441	Solutions	technoeconomic analysis, and political ecology.	Yes			Yes	Yes		
School of Global Environmental Sustainability	GES 450	Global Sustainability & Health	Impact of anthropogenic environmental change on human, animal and environmental health.	Yes		Yes				
			Introduction to the domestic and international laws that							
School of Global Environmental Sustainability	GES 460	Law & Sustainability	influence and interact with the implementation of sustainability in the U.S. and abroad.		Yes	Yes		Yes		
Sustamability	GE3 400	Law & Sustainability	in the O.S. and abroad.		res	res		res		
School of Global Environmental Sustainability	GES 465	Sustainable Electronics	Trans-disciplinary overview of the electronics industry, with an emphasis on sources and impacts of e-waste on human & natural systems. Systems approaches to mitigating environmental and social impacts of electronicsfrom product design, materials and manufacture to use, re-use, recycle and disposal. Apply learnings in trans-disciplinary project teams to evaluate opportunities for improving the sustainability of the industry and its products.	Yes			Yes	Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
School of Global Environmental		Applications of Environmental	Integration of the dimensions of global environmental sustainability-environment, society, and economy-through case							Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or
Sustainability	GES 470	Sustainability	studies and team project.	Yes		Yes		Yes		Unit, Discussion/Recitation
Ecosystem Science & Sustainability	WR 204	Sustainable Watersheds	Effects of climate, land use, and water use on the sustainability of water quantity and quality.	Yes			Yes			Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit
			Introduction to decision-making by consumers, firms, and							
Agricultural & Resource		Agricultural and Resource	government and the resulting allocation of resources through		,		.,		.,	
Economics Agricultural & Resource Economics	AREC 202	Economics Economics of Food Systems	markets. Examine the food system using an economic lens. Review the physical, political, and structural context in which the US agricultural system is embedded. Use economic tools and concepts to analyze different components of the food system, as well as potential tradeoffs associated with different policy or other interventions.		Yes	Yes	Yes	Yes	Yes	Lecture(s),Assignments(s)/Graded Deliverable(s)
Agricultural & Resource Economics	AREC 240	Issues in Environmental Economics	Discussion and economic analysis of current environmental issues with special emphasis on the impact of economic growth.	Yes			Yes	Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Agricultural & Resource Economics	AREC 305	Agricultural and Resource Enterprise Analysis	Use of records in agricultural and resource enterprise management; analytical methods, budgets, and planning techniques for improved decision making.		Yes		Yes		Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Lab(s)
Agricultural & Resource Economics	AREC 340	Introduction to Economics of Natural Resources	Concepts, theories, institutions; analytical methods for economic evaluation of alternative resource use patterns and land use plans.	Yes			Yes	Yes		Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation

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			Economic theories and analytic frameworks are developed and							Lecture(s), Assignments(s)/Graded
Agricultural & Resource			applied to contemporary problems of the use and protection of							Deliverable(s),Readings/Video/Podcast,Module or
Economics	AREC 341	Environmental Economics	the natural environment.		Yes		Yes		Yes	Unit
			Legal water issues within the context of historical, social and							
Agricultural & Resource			economic development with emphasis on the southwestern							
Economics	AREC 342	Water Law, Policy and Institutions	United States.		Yes		Yes		Yes	Lecture(s), Guest speaker(s), Readings/Video/Podcast
			Application of benefit-cost framework to public planning for							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			outdoor recreation. Topics include non-market valuation,							
Agricultural & Resource			projecting demand, cost of supplying recreation, and regional							Lecture(s), Assignments(s)/Graded
Economics	AREC 346	Economics of Outdoor Recreation	economic development.	Yes			Yes	Yes		Deliverable(s),Module or Unit
Economics	AREC 340	Economics of Outdoor Recreation		res			163	ies		Deliverable(s), wiodule of Offic
			Microeconomic techniques to rigorously explore economic							
Agricultural & Resource		Advanced Environmental &	decision-making and policy as they apply to environmental and							
Economics	AREC 440	Resources Economics	natural resource problems.		Yes	Yes		Yes		
			Supply, consumption trends, and projected demand for							
Agricultural & Resource			alternative energy resources in domestic and world perspective;							
Economics	AREC 444	Economics of Energy Resources	economics of public energy policies.		Yes	Yes		Yes		
			Indicators, tools and approaches for agriculture- and natural							Lecture(s), Assignments(s)/Graded
Agricultural & Resource		Agricultural & Resource Based	resource-based economic development in resource dependent							Deliverable(s),Readings/Video/Podcast,Module or
Economics	AREC 460	Economic Development	countries and communities.	Yes		Yes		Yes		Unit, Discussion/Recitation
		·								
			Apply systems thinking and dynamic systems modeling to case							
			studies and a capstone project that poses sustainable solutions							
		Applications in Agricultural Biology	to biological problems in natural or managed ecosystems. Hone							
Agricultural Biology	AB 430	Applications in Agricultural Biology	career plans and professional skills.	Ves		Vos		Vos		
Agricultural Biology	Ab 450	ll e	career plans and professional skills.	Yes		Yes		Yes		
										Lecture(s),Guest speaker(s),Assignments(s)/Graded
			Concepts of integrated pest management and the strategies and							Deliverable(s),Readings/Video/Podcast,Discussion/R
Agricultural Biology	BSPM 451	Integrated Pest Management	tactics employed in the application of these concepts.	Yes		Yes		Yes		ecitation
			Evolution of the social values and cultural understandings shaping							
		Values, Culture, and Food Animal	modern animal agriculture; current problems in animal							
Animal Sciences	ANEQ 104	Agriculture	agriculture.	Yes		Yes			Yes	
										Lecture(s),Assignments(s)/Graded
										Deliverable(s),Readings/Video/Podcast,Module or
			Processes by which cultures change and modernize, 1989 to the							Unit,Discussion/Recitation,Other (please describe):
Anthropology & Geography	ANTH 313	Modernization and Development	present.	Yes		Yes		Yes		museum tours
Antinopology & deagraphy	AIVIII 313	Indigenous Ecologies of the	Impact of the modern world in indigenous peoples' relationship	103		103		163		mascam tours
Anthropology & Goography	ANTH 415	Modern World		Voc		Voc			Voc	
Anthropology & Geography	ANITI 415	Modern World	to their environments and natural resources.	Yes		Yes			Yes	
			Contemporary issues in international community and economic							Lecture(s),Guest speaker(s),Assignments(s)/Graded
			development, with practical and theoretical analysis from							Deliverable(s),Readings/Video/Podcast,Module or
Anthropology & Geography	ANTH 479	International Development	interdisciplinary perspectives.	Yes		Yes		Yes		Unit
										Lecture(s), Guest speaker(s), Assignments(s)/Graded
			Effects of climate, land use, and water use on the sustainability of							Deliverable(s),Readings/Video/Podcast,Module or
Anthropology & Geography	GR 204	Sustainable Watersheds	water quantity and quality.	Yes			Yes			Unit
			Explore the various drivers of migration, emphasizing climate and							
			others including biogeographic, political, economic, and social							
Anthropology & Geography	GR 213	Climate Migrants	factors.	Yes		Yes		Yes		
· ····································			Examines human-environment relationships using geographic							
			theories, geographic methods, and empirical evidence. Explores							
		1				1	1		1	Lecture(s),Assignments(s)/Graded
			cross-scalar geographic interactions that shape environmental							
	cn 24=	I.,	change and emphasizes critical thinking and small group			l.			l.,	Deliverable(s),Readings/Video/Podcast,Discussion/R
Anthropology & Geography	GR 217	Human-Environment Geographies	interactions.	Yes	1	Yes	_	1	Yes	ecitation
			Social relations, international trade, and environmental impacts							
			surrounding the production, transportation, exchange, and							
Anthropology & Geography	GR 415	The Geography of Commodities	consumption of commodities.	Yes		Yes		Yes		
		1				1			1	
		1	Examines development processes through a critical geography			1			1	
			lens. Assesses the social and environmental impacts of various			1	1			
			development interventions – from tropical medicine in the			1	1			
		1	colonial era to Green Revolution technologies and current			1			1	
Anthropology & Geography	GR 418	Development Geographies	Chinese infrastructural development in Africa.	Yes		Yes		Yes	1	
	ON 410	perciopinent deograpmes	onnese minus auctural development in Airica.			1.03	1	1.03	1	1

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			Foundational understanding of visual literacy as part of a creative							Lecture(s), Guest speaker(s), Assignments(s)/Graded
			practice through the development of two-dimensional artworks exploring form through observational methods in relation to							Deliverable(s),Lab(s),Discussion/Recitation,Other (please describe): focus on interdiscipliry
Art & Art History	ART 135	Form and Observation	interdisciplinary concepts.	Yes		Yes			Yes	foundations work with sustaible materials research
			Introduction to the materials, processes, and concepts that							Lecture(s), Guest speaker(s), Assignments(s)/Graded
			ground the field of contemporary printmaking. Explore multiple							Deliverable(s),Readings/Video/Podcast,Lab(s),Discus
Art & Art History	ART 265	Printmaking I-Intaglio&Relief	techniques of printmaking. Develop an individual artistic practice.	Yes		Yes			Yes	sion/Recitation
										Lecture(s),Guest speaker(s),Assignments(s)/Graded
										Deliverable(s),Readings/Video/Podcast,Lab(s),Discus
										sion/Recitation,Service Learning/Community
										Service, Other (please describe): Collaborations with
										non-profits and community stakeholders: Africa Center, Poudre Valley Fire Authority, Gregory Allicar
			Advanced intaglio, relief, planographic, and stencil processes in							Museum of Art, Poudre Valley Public Library,
Art & Art History	ART 366	Printmaking III-Studio Workshp	the workshop, continued emphasis on individual creative growth.	Yes		Yes			Yes	Veteran Services Center
										Lecture(s),Assignments(s)/Graded
Art & Art History	ART 381A4	Scroon Brinting (Sorigraphy)	Community immersive project through "Mobile Brint Bower"	Yes		Yes			Yes	Deliverable(s),Readings/Video/Podcast,Lab(s),Discus sion/Recitation,Service Learning/Community Service
Art & Art history	AKI 361A4	Screen-Printing (Serigraphy)	Community immersive project through "Mobile Print Power"	res		res			res	sion/Recitation, service Learning/Community Service
			Interdisciplinary studio/seminar course investigating art's							Lecture(s),Guest speaker(s),Assignments(s)/Graded
			relationship to the environment through readings, field trips,							Deliverable(s),Readings/Video/Podcast,Module or
Art & Art History	ART 421	Art and Environment	presentations and studio practice.	Yes		Yes				Unit,Discussion/Recitation
										Lecture(s),Guest speaker(s),Assignments(s)/Graded
			Advanced printmaking workshop; intaglio, relief, planographic,							Deliverable(s),Readings/Video/Podcast,Lab(s),Discus
Art & Art History	ART 466	Printmaking V-Studio Workshop	and stencil; continued emphasis on individual creative growth.	Yes		Yes		Yes		sion/Recitation
·			Physical basis of climate change. Energy budget of the earth, the							
			greenhouse effect, carbon cycle, paleoclimate, projections of 21st							
Atmospheric Science	ATS 150	Science of Global Climate Change	century climate. Broad introduction to terrestrial and aquatic tropical biodiversity	Yes		Yes				
			and the ecological and evolutionary processes that generate and							Lecture(s), Guest speaker(s), Assignments(s)/Graded
Biology	BZ 349	Tropical Ecology and Evolution	maintain it.	Yes			Yes		Yes	Deliverable(s),Readings/Video/Podcast
			Ecological perspectives of infectious disease outbreaks in wildlife							
Biology	BZ 418	Ecology of Infectious Diseases	and human populations.	Yes		Yes				
Business	BUS 201	Foundations of Sustainable Enterprise	Basics of sustainability in business and implications for business decision making.		Yes	Yes		Yes		
Dusiness	B03 201	Enterprise	decision making.		163	ies		163		
			Processes that control the fate of chemicals in the environment.							
			Focus on the chemistry of the atmosphere, hydrosphere, and							
			soils, especially as it pertains to pollution of these environmental							
			compartments. Topics covered in the course may include smog and air pollution, ocean acidification, acid mine drainage,							
Chemistry	CHEM 338	Environmental Chemistry	pesticide chemistry, and heavy metal contamination.	Yes		Yes				
Civil & Environmental		,	Principles of ecological engineering and design of sustainable							
Engineering	CIVE 330	Ecological Engineering	ecosystems.	Yes		Yes				
										Lecture(s) Guest speaker(s) Assignments(s)/Craded
			Concepts of sustainable engineering principles in civil and							Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/R
Civil & Environmental		Sustainable Civil/Environmental	environmental engineering. Life cycle analysis. Life cycle cost							ecitation,Other (please describe): Term paper on
Engineering	CIVE 405	Engineering	analysis. LEED and Envision rating systems. Resiliency concepts.	Yes		Yes		Yes		sustaibility topic of students choice
Civil & Environmental			Principles, processes, impacts and control of nonpoint source			L				
Engineering	CIVE 440	Nonpoint Source Pollution	pollution of surface and groundwater.	Yes		Yes			Yes	
			Air pollution problems and solutions, at scales ranging from local to global. Quantitative analysis of chemical and physical							
Civil & Environmental			processes governing air pollutants in natural and built							
Engineering	CIVE 442	Air Quality Engineering	environments.	Yes		Yes			Yes	

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		Sustainable Design and	Major components of sustainable design/construction: energy, healthy buildings, cultural, natural resources, use, other							Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or
Construction Management	CON 476	Construction	environment/economic issues.	Yes			Yes	Yes		Unit,Discussion/Recitation
		Residential Aging-In-Place and	Aging-in-place and green building aspects of the residential							
Construction Management	CON 477	Green Building	construction market.		Yes	Yes		Yes		
			Structure of textiles and apparel industry; global sourcing,							
		Global Sourcing of Textiles and	production, distribution and consumption of textile and apparel products. Implications for sustainability in the textiles and							
Design & Merchandising	AM 330	Apparel	apparel industry.		Yes	Yes		Yes		
besign a werenandsing	AIVI 330	прригег	apparer maustry.		163	163		163		
										Lecture(s), Guest speaker(s), Assignments(s)/Graded
										Deliverable(s),Readings/Video/Podcast,Lab(s),Discus
										sion/Recitation,Other (please describe): Sustaible
			Employ design thinking theories and methods to textile projects							textile design and materials research. Community
Danies This bis -	IDEA 2405	Farm dations of Tartila Danisa	that promote "iterative tinkering" through exploration of various	V		v		v		engagement and collaborative design thinking
Design Thinking	IDEA 310F	Foundations of Textile Design	design processes in a maker space setting.	Yes		Yes		Yes		projects with an emphasis on circular economies
			Economic analysis of poverty, crime, education, and/or other							
Economics	ECON 101	Economics of Social Issues	social issues. Basics of micro, macro, and political economy.			Yes		Yes		
			Role gender plays in economies; the way gender affects							
Economics	ECON 211	Gender in the Economy	economic outcomes for individuals and societies.			Yes		Yes		
			Economic inequality based on race or ethnicity in the United							
		Racial Inequality and	States. Economic debates about sources, consequences, and							
Economics	ECON 212	Discrimination	remedies.			Yes		Yes		
										Lastronia Constantina (a) Assistant and (a) (Constant
			Discussion and economic analysis of current environmental issues							Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or
Economics	ECON 240	Issues-Environmental Economics	with special emphasis on the impact of economic growth.	Yes			Yes	Yes		Unit, Discussion/Recitation
Economics	ECON 240	133de3-Environmental Economics	with special emphasis on the impact of economic growth.	163			163	163		Offit, Discussion, Necttation
			Concepts, theories, institutions; analytical methods for economic							Lecture(s),Guest speaker(s),Assignments(s)/Graded
		Introduction -Economics of Natural	evaluation of alternative resource use patterns and land use							Deliverable(s),Readings/Video/Podcast,Module or
Economics	ECON 340	Resources	plans.	Yes			Yes	Yes		Unit,Discussion/Recitation
			Application of benefit-cost framework to public planning for							
			outdoor recreation. Topics include non-market valuation,							
	50011046		projecting demand, cost of supplying recreation, and regional	.,			.,	.,		Lecture(s),Assignments(s)/Graded
Economics	ECON 346	Economics of Outdoor Recreation	economic development.	Yes			Yes	Yes		Deliverable(s),Module or Unit
			Supply, consumption trends, and projected demand for alternative energy resources in domestic and world perspective;							
Economics	ECON 444	Economics of Energy Resources	economics of public energy policies.	Yes			Yes	Yes		
			Learning writing strategies for addressing general audiences in							Lecture(s),Assignments(s)/Graded
English	CO 301B	Writing in the Disciplines: Sciences	sciences.	Yes		Yes				Deliverable(s), Discussion/Recitation
										Lecture(s),Guest speaker(s),Assignments(s)/Graded
F 11.1	- 465			.,		l,			.,	Deliverable(s),Readings/Video/Podcast,Module or
English	E 465	Topics-Literature and Language	Selected issues in literature and language. Impact of people on the physical and biological environment as	Yes		Yes			Yes	Unit,Discussion/Recitation
Environmental & Radiological			well as impact of the environment on people; emphasis placed on							
Health Sciences	ERHS 220	Environmental Health	human health.	Yes		Yes				
			Key concepts, theories, and historical experiences that form the							Lecture(s),Assignments(s)/Graded
			basis of scholarly work in comparative ethnic studies,							Deliverable(s),Readings/Video/Podcast,Module or
Ethnic Studies	ETST 100	Introduction to Ethnic Studies	domestically and internationally.		Yes	Yes		Yes		Unit,Discussion/Recitation
			International, national, regional, and local perspectives on							
			current issues in Native America. Key issues include identity,							
			gender, tribal governance and sovereignty, settler colonialism,							
			law and policy, education, language, culture, health disparities,							
Ethnic Studies	ETST 260	Contemporary Indigenous Issues	cultural resources, religious freedom, the environment, and activism.		Yes	Yes		Yes		
Ethinic Studies	L131 200	Contemporary mulgenous issues	activisiii.		163	163		163		
			How the world's poor and minorities self-empower to challenge	1						Lecture(s),Guest speaker(s),Assignments(s)/Graded
		Global Environmental Justice	institutional racism and government apathy in order to secure	1						Deliverable(s),Readings/Video/Podcast,Module or
Ethnic Studies	ETST 365	Movements	basic environmental goods.	Yes		Yes			Yes	Unit, Discussion/Recitation
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Ethnic Studies	ETST 381A3	Horror Films, Race and Women	The term 'gynaehorror' refers to horror films that are concerned with female sex, sexuality, and reproduction. Expand upon this ideology to include the critical use of women's bodies as not only sites of sexuality and reproduction, but also locations of ritual and cultural influence. While concentrating primarily on American horror films from the 1960s to present, also view horror films from Korea, Iran, Japan, and Vietnam.		Yes	Yes	Yes		Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Ethnic Studies	ETST 411	Black Feminism(s)	History and trajectory of Black feminist thought from the nineteenth century to the present.		Yes	Yes	Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Ethnic Studies	ETST 441	Indigenous Knowledges	Develop an understanding of Indigenous world views, by exploring Indigenous knowledge production, knowledge systems, core values, and ways of living. Builds on the foundation that Indigenous peoples have always had their own philosophies, teachings, and consciousness. Explores the rigorous and deeprooted, Indigenous intellectual traditions and the sharing of information both formalized and localized.	Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Fish, Wildlife & Conservation Biology	FW 304	Conservation of Marine Megafauna	The ecology, systematics, behavior and conservation of large marine animals including giant squid, bony fishes, sharks, sea turtles, seabirds, and marine mammals. Examines the relations between ocean dynamics and large marine animals, and provides insights in the roles that marine megafauna species play in ocean ecosystems. Study impacts of human activities, such as bycatch and climate change, and their effect on ocean species.	Yes		Yes	Yes		
Fish, Wildlife & Conservation Biology	FW 310	Mapping Diverse Perspectives in Conservation	Principles and geospatial tools to explore conservation science and practice through diverse social and cultural perspectives. Through discussions and hands-on mapping exercises, develop a spatial understanding of diverse perspectives and social justice issues in conservation, including mapping local ecological knowledge, patterns of environmental injustice, hotspots of biological and cultural diversity, human-wildlife conflict, and non-colonialist geographies. No GIS experience required.	Yes		Yes	Yes		
Forest & Rangeland Stewardship	F 322	Economics of the Forest Environment	Economic principles and techniques applied to forested environments.	Yes		ies	Yes		
Forest & Rangeland Stewardship	F 325	Silviculture	Principles of silviculture and the application to ecologically-based management and restoration of forests ecosystems.	Yes			res	Yes	
Forest & Rangeland Stewardship Forest & Rangeland	F 421	Ecological Forest Management	Preparation of forest management plans to achieve integrated environmental and economic goals based upon principles of forest ecology; evaluation of alternative prescriptions; adaptive management and monitoring. Policies and management of publicly and privately owned	Yes			Yes		
Stewardship	F 466	Urban and Community Forestry	community forests in urbanized areas.	Yes		Yes			
Forest & Rangeland Stewardship	NR 130	Global Environmental Systems	Studies of the Earth's lithosphere, hydrosphere, atmosphere, and biosphere systems and their interrelations with human dimensions.	Yes		Yes			
Forest & Rangeland Stewardship	NR 192	First Year Seminar in Environmental Studies	Introduction to the disciplines involved in natural resources through exposure to current issues. This course is taught as part of the WCNR Residential Learning Communities, so students are engaged in an immersive, residential first year experience focused on natural resource leadership through the lens of environmental science	Yes		Yes	Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service,Other (please describe):
Forest & Rangeland Stewardship	NR 370	Coastal Environmental Ecology	Sensitive and complex coastal area environments and the effects of accelerated change on and offshore caused by human activities.	Yes		Yes			

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Why some individuals are at high risk for poor developmental outcomes, and why certain individuals fare well despite such risks or adversities. Strong developmental emphasis because resilience is viewed as a process, the results of which may not be manifest for years. There is an ecological emphasis because protective and vulnerability factors often reside in families, Studies HDFS 434 HDFS 434 HDFS 434 Principles - Parks/Protected Area Principles - Parks/Protected Area Why some individuals are at high risk for poor developmental outcomes, and why certain individuals fare well despite such risks or adversities of which may not be manifest for years. There is an ecological emphasis because protective and vulnerability factors often reside in families, Yes Yes Yes Yes Yes Area Challenges, and practices of parks and protected areas					.,		L.		l.,		
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or adversities. Strong developmental emphasis because resilience is viewed as a process, the results of which may not be manifest for years. There is an ecological emphasis because protective and vulnerability factors often reside in families, schools, neighborhoods. HDFS 434 Lifespan schools, neighborhoods. Principles - Parks/Protected Area Principles - Parks/Protected Area or adversities. Strong developmental emphasis because resilience is viewed as a process, the results of which may not be manifest for years. There is an ecological emphasis because protective and vulnerability factors often reside in families, schools, neighborhoods. Yes Yes Yes Yes Yes											
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Human Development & Family Studies HDFS 434 Risk and Resilience Across the Lifespan Principles - Parks/Protected Area Principles											
Human Development & Family Studies Risk and Resilience Across the Lifespan Risk and Resilience Across the Lifespan Provide a broad but comprehensive understanding of the history, Challenges, and practices of parks and protected areas											
Studies HDFS 434 Lifespan schools, neighborhoods. Yes Yes Yes Yes Yes Human Dimensions of Natural Principles - Parks/Protected Area challenges, and practices of parks and protected areas				manifest for years. There is an ecological emphasis because							
Studies HDFS 434 Lifespan schools, neighborhoods. Yes Yes Yes Yes Yes Human Dimensions of Natural Principles - Parks/Protected Area challenges, and practices of parks and protected areas	Human Development & Family		Risk and Resilience Across the	protective and vulnerability factors often reside in families,							
Provide a broad but comprehensive understanding of the history, Human Dimensions of Natural Principles - Parks/Protected Area challenges, and practices of parks and protected areas	Studies	HDFS 434			Yes		Yes			Yes	
Human Dimensions of Natural Principles - Parks/Protected Area challenges, and practices of parks and protected areas			·								
	III	l	Poinciples Pauls /P + + + + /	**************************************				Ì			
kesources NKKI Z31 Ivianagement management. Yes Y		NIDDT 224			W		W			V	
	Kesources	NKRT 231	Management	management.	Yes		Yes	l		Yes	

									1	
Human Dimensions of Natural		International Issues - Recreation &	History, development, and preservation of international parks,							
Resources	NRRT 320	Tourism	preserves, tourist and historical sites.	Yes		Yes			Yes	
			Review social science concepts and research important to the							
			way humans use and manage natural resources. Using lectures							
			and readings on social theory and management frameworks,							
			dissect current natural resource management issues. Case study							
			presentations, exercises, and discussions will connect various							Lecture(s), Assignments(s)/Graded
Human Dimensions of Natural		Social Aspects of Natural Resource	social science approaches and theoretical frameworks to their							Deliverable(s),Readings/Video/Podcast,Module or
Resources	NRRT 330	Management	natural resource applications.	Yes		Yes		Yes		Unit,Discussion/Recitation
Human Dimensions of Natural		Principles in Conservation Planning	Social, economic, legal, and ecological concepts that shape							
Resources	NRRT 340	and Management	planning and management frameworks within conservation.	Yes		Yes		Yes		
nesources	1411111 540	and Wanagement	planning and management nameworks within conservation.	103		103		103		
Human Dimensions of Natural			Theory and practice of prevalent environmental governance							
Resources	NRRT 400	Environmental Governance	approaches in diverse social and environmental contexts.	Yes		Yes		Yes		
Resources	141(1(1 400	Elivironiniental Governance		163		163		163		
			Exploration of cultural and political ecology, the study of							
			(un)equal control of, and access to, natural resources, focuses on							
			human-environment interactions, with particular attention to the							
			social and cultural meanings of resources. Entails the							
			interrogation of definitions of nature and culture, interactions							
Human Dimensions of Natural			between society and nature, and natural resource management,							
Resources	NRRT 402	Cultural and Political Ecology	access and control.	Yes		Yes			Yes	
Resources	141111 402	Cultural and Folitical Ecology	access and control.	163		163			163	
			Examine the impacts of tourism from several distinct, but							
			interrelated perspectives: social, political, economical,							
			environmental, and technological. Limits to future tourism							
Human Dimensions of Natural			growth are discussed and possible strategies to mitigate impacts							
Resources	NRRT 470	Tourism Impacts	are detailed. Case studies are used to highlight issues discussed.	Yes		Yes		Yes		
			Develop knowledge and skills important for leading others to							
			achieve positive outcomes in conservation. Fundamental							
			leadership and systems-thinking principles are applied to analyze							
			case studies in conservation, and determine courses of action							
			that positively affect conservation. Through building self-							Lecture(s), Assignments(s)/Graded
Human Dimensions of Natural			awareness, exploring leadership strategies, and systems-thinking,							Deliverable(s),Readings/Video/Podcast,Module or
Resources	NRRT 475	Leadership for Conservation	skills are gained to make a difference in socio-ecological systems.	Yes		Yes		Yes		Unit,Discussion/Recitation
			Contemporary issues in international community and economic							Lecture(s), Guest speaker(s), Assignments(s)/Graded
			development with practical and theoretical analysis from							Deliverable(s),Readings/Video/Podcast,Module or
International Education	IE 479	International Development	interdisciplinary perspectives.	Yes		Yes		Yes		Unit
meerida Eddadion	12 173	meerinational Severopinient	interaction in the respectives.	1.63		103		1.03		Deliverable(s),Readings/Video/Podcast,Module or
			Entrepreneurship and economic opportunities in the transition to							Unit,Discussion/Recitation,Service
Management	MGT 360	Social & Sustainable Venturing	a socially and ecologically sustainable global economy.	Yes		Yes		Yes		Learning/Community Service
		Global Ethical Leadership &	Develop knowledge and competence in global ethical leadership							
Management	MGT 435	Stakeholder Management	and stakeholder relationships in a global economy.		Yes	Yes		Yes		
			Trans-disciplinary overview of the electronics industry, with an							
			emphasis on sources and impacts of e-waste on human & natural							
			systems. Systems approaches to mitigating environmental and							
			social impacts of electronicsfrom product design, materials and							
			manufacture to use, re-use, recycle and disposal. Apply learnings							Lecture(s), Guest speaker(s), Assignments(s)/Graded
Matarials Caion 0										
Materials Science &			in trans-disciplinary project teams to evaluate opportunities for	.,			.,		.,	Deliverable(s),Readings/Video/Podcast,Module or
Engineering	MSE 465	Sustainable Electronics	improving the sustainability of the industry and its products.	Yes			Yes		Yes	Unit,Discussion/Recitation
1			Principles of green engineering in the context of materials,			I				
1			human dependence on materials, and the environmental			1				
1			consequences of materials selection. Perspective, background,			1				
1		Groon Engineering Materials 9				I				
Machanical Englished	MECH 43C	Green Engineering - Materials &	methods, and data for evaluating and designing with materials to	Vos		Vas				
Mechanical Engineering	MECH 436	Environment	minimize the environmental impact.	Yes	l	Yes	1	l	l	

										
			Introductory philosophical examination of the idea of fairness					i i		
		Environmental Justcie and	through an exploration of environmental justice and	i i				i i		
Philosophy	PHIL 145	Sustainability	sustainability.	Yes		Yes		i i		
			Ethical and conceptual issues surrounding creation of sustainable	l		1				
Philosophy	PHIL 320	Ethics of Sustainability	societies and lifestyles.	Yes		Yes		1		
			·							Lecture(s),Assignments(s)/Graded
			Scientific, philosophical, and religious concepts of nature as they					i i		Deliverable(s),Readings/Video/Podcast,Discussion/R
Philosophy	PHIL 345	Environmental Ethics	bear on human conduct; an ecological perspective.	Yes		Yes		Yes		ecitation
		US Environmental Politics and	Public and contemporary issues relating to U.S. environmental	100		1.00				
Political Science	POLS 361	Policy	policy.	Yes		Yes		1	Yes	
r diltical science	F 013 301	rolley	Cross-national and international contexts of environmental	163		163	+		163	
Political Science	POLS 362	Global Environmental Politics	politics and policy.	Yes		Yes		i i	Yes	
Political Science	PULS 362	Global Environmental Politics	· · ·	res		res			res	
			Discussion and analysis of air quality, climate, and energy nexus,	i				1		
		l., ' '	with a focus on policy impacts on the economy and the	i		l		1		Assignments(s)/Graded Deliverable(s),Module or
Political Science	POLS 364	Air and Energy Policy Analysis	environment under future scenarios.	Yes		Yes		Yes		Unit,Discussion/Recitation
				i i				i i		
			Examines procedural environmental injustice, as defined by the					i i		
			exclusion of marginalized groups from decision-making processes					i i		
			and the underenforcement of environmentally protective	i i				i i		
			regulations in marginalized communities. Exploration of the					i i		
			degree to which power, equity and inclusion in policy processes					i i		
		Power, Equity, and Inclusion in	create and perpetuate marginalization, weaving a single case							
Political Science	POLS 367	Environmental Justice	study throughout the semester for illustration.	Yes		Yes				
		Globalization, Sustainability, and	Public and private policies to promote sustainability and social			1				
Political Science	POLS 462	Justice	justice in a globalizing world.	Yes		Yes		Yes		
			J	100		1.00				
			Historical, social, political, philosophical, cultural, and economic							
			forces that shape the United States public school system. Current							
			issues of educational reform, educational technology, and							
			considerations related to becoming a teacher in the state of							
			Colorado are explored. Special interest will be paid to the topic of	i i	l.,	l.,				
School of Education	EDUC 275	Schooling in the United States	diversity in the PK-12 school system.		Yes	Yes		Yes		Lecture(s)
				i				1		
			Introduces the social causes and consequences of contemporary	i				1		
			environmental issues. Critically analyzes social structures such as	ł				1		Lecture(s), Assignments(s)/Graded
			capitalism, beliefs and cultural norms, and social inequalities in	i				1		Deliverable(s),Readings/Video/Podcast,Discussion/R
Sociology	SOC 220	Environment, Food, and Justice	relation to food and the environment.	Yes		Yes			Yes	ecitation
		Population - Natural Resources &	Population studies; world growth patterns and their relationship					i i		
Sociology	SOC 320	Environment	to natural resources and environment.	Yes		Yes		i i		
				1						
			Examines inequitable exposure to degraded environments and	ł				1		
			access to healthy and clean places and amenities in the United	i				1		
			States and globally. Explores the structural forces leading to	i				1		
			environmental disparities and how environmental justice	i				1		
Sociology	SOC 322	Environmental Justice	movements and activists organize for change.	Yes		Yes		1	Yes	
Sociology	300 322	Environmentariustice	movements and activists organize for change.	163		163	+		163	
			lancation to a the institution of delicens and assist according	i i				i i		
			Investigates the institutional drivers and social experiences of					i i		
			inequities in the food system. Examines how the food justice					i i		
		/L	movement responds by organizing for grassroots, community,	l		l.,				
Sociology	SOC 324	Food Justice		Yes		Yes		Yes		
			Environmental offenses, victims, and responses to environmental	ł				1		
Sociology	SOC 359	Green Criminology	crimes and harms.	Yes		Yes		-	<u> </u>	
								i i		
			Investigates vital questions about the relationships between	i i				i i		
			human societies and biophysical systems. Examines topics such							
			as global climate change, biodiversity loss, and industrial							
			contamination. Considers why building better political and							
		Environmental & Natural Resource	economic systems is critical to solving such multi-scalar							
Sociology	SOC 460	Sociology	environmental problems.	Yes		Yes			Yes	
			Analyzes how human societies interact with and depend upon							
			water with attention to institutions and inequalities. Examines	i			1	1		
	1	1	various power dynamics of water access, control, rights, and	i			1	I		
	1	1	management, and sustainable and just solutions to complex	i			1	I		
Sociology	SOC 461	Water & Social Justice	water problems.	Yes		Yes	i	ļ		

Soil & Crop Sciences	SOCR 171		Historical development of agriculture; environmental consequences of modern food production and other cultural approaches to agriculture.	Yes	Yes		Yes	
			Microorganisms are the most abundant living entities on earth.					
		Microbiome Roles in a Sustainable	Examine the incredible ways that microbes affect our everyday					
Soil & Crop Sciences	SOCR 210	Earth	lives and contribute to a sustainable planet.	Yes	Yes			

Undergraduate Sustainabili	tv-Inclusive	Courses								
Ondergraduate Sustamabili	Ly-Inclusive	Courses		Enviromental	Environmental	Social		Economic	Economic	
Department	Course #	Course Name	Course Description	Focused	Inclusive	Focused	Social Inclusive	Focused	Inclusive	How Sustainability Concepts are Integrated
Santana Calanaa Q Containahilita	ESS 411	Family Contains Family	Earth as a system, stressing ecological interactions	V						
Ecosystem Science & Sustainability	ESS 411	Earth Systems Ecology	among energy, water, and biogeochemistry.	Yes						Lecture(s),Guest
										speaker(s),Assignments(s)/Graded
			Principles of ecosystems ecology, emphasis on their							Deliverable(s), Readings/Video/Podcast, Discussio
Ecosystem Science & Sustainability	ESS 311	Ecosystem Ecology	application to coupled natural and human systems.		Yes		Yes			n/Recitation
										Assignments(s)/Graded Deliverable(s),Other
										(please describe): The breadth of sustaibility-
										related concepts is discussed in this class as
										students identify their professional area(s) of interest in ecosystem, sustaibility, and/or
										watershed science and focus their assignments
										(resume and LinkedIn development, job
										searching, etc.) on those professional areas. This
			Career-related skills and professional development in							course is recitation-based, so theory and practice
Ecosystem Science & Sustainability	ESS 320	Internship/Career Preparation	ecosystem science and sustainability (ESS) for majors.		Yes		Yes		Yes	are not conceptually discussed.
			Exploration of the fields of Ecosystem Science and							
		Introduction to Ecosystem	Sustainability and Watershed Science, including career							
Ecosystem Science & Sustainability	ESS 120	and Watershed Sciences	pathways.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Module or Unit
			Introduction to the concept of a "system,"							Lecture(s),Guest
			fundamental tenets of systems theory, and application							speaker(s),Assignments(s)/Graded
Farancia Calana & Containability	ESS 130	Introduction to Systems	of systems theory to the sustainability of social-							Deliverable(s),Readings/Video/Podcast,Discussio n/Recitation
Ecosystem Science & Sustainability	ESS 130	Theory for Sustainability	ecological systems. Physical, chemical, biological water quality							n/ Recitation
			parameters affecting land use; land management to							Lecture(s),Guest
			maintain water quality; water quality standards,							speaker(s), Assignments(s)/Graded
Ecosystem Science & Sustainability	WR 418	Land Use and Water Quality	legislation.		Yes		Yes		Yes	Deliverable(s),Readings/Video/Podcast
			Fundamental concepts in hydrology and effects of							Lecture(s), Assignments(s)/Graded
Ecosystem Science & Sustainability	WR 416	Land Use Hydrology	land use on hydrologic processes.		Yes					Deliverable(s),Readings/Video/Podcast
Farancia Calana & Containability	FCC 220	Danasah Markhada I	Fundamental skills for participating in ecosystem		V		V			Lecture(s),Assignments(s)/Graded
Ecosystem Science & Sustainability	ESS 220	Research Methods I	science research through hands-on learning modules. Advanced topics in the practice of the scientific		Yes		Yes			Deliverable(s),Readings/Video/Podcast Lecture(s),Assignments(s)/Graded
Ecosystem Science & Sustainability	ESS 221	Research Methods II	method and participation in research.		Yes		Yes			Deliverable(s),Readings/Video/Podcast
					1					
			Capstone integration of spatial watershed issues,							Assignments(s)/Graded
Ecosystem Science & Sustainability	WR 440	Watershed Problem Analysis	focused on problem solving in watershed science.		Yes		Yes		Yes	Deliverable(s), Discussion/Recitation
			This seminar introduces students to methods,							
School of Global Environmental			practices, and ways of knowing in the disciplines							
Sustainability School of Global Environmental	GES 192	GES Seminar Systems Thinking in	represented in this multi-disciplinary field of study. Build competencies in systems thinking, quantitative		Yes		Yes		Yes	
Sustainability	GES 201	Sustainability	and qualitative modeling.		Yes		Yes		Yes	
Sustainability	OLS ZOI	Sustainability	and quantitative modeling.		163		163		163	
			Water and the sustainability of its use in the West.							
			Historical perspectives on the development of water							
			resources in the West. Exploration of the issues							
			involved in meeting the needs for water by people,							Lecture(s),Guest
			agriculture and wildlife. Impacts of important human							speaker(s),Assignments(s)/Graded
School of Global Environmental			and natural influences on the use and sustainability of							Deliverable(s), Module or
Sustainability	GES 120	Water in the Western US	water supplies in the West.	Yes			Yes		Yes	Unit,Discussion/Recitation

			T	1	1	1	1	1		
Accounting	ACT 411	Advanced Accounting	Accounting for branches and subsidiaries, partnerships, and business combinations. Accounting for multi-national business transactions.		Yes		Yes	Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service
			Formulation, evaluation, and administration of public							
			policies affecting the agricultural and natural resource							Lecture(s),Assignments(s)/Graded
Agricultural & Resource Economics	AREC 478	Agricultural Policy	industries in the United States.		Yes		Yes		Yes	Deliverable(s),Readings/Video/Podcast
										Lecture(s),Guest
			Theoretical principles that underlie real estate appraisal methods. Procedures and practices used in							speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Other
Agricultural & Resource Economics	AREC 454	Real Estate Appraisal	real estate appraisal.		Yes		Yes		Yes	(please describe): field trip
g		г. с								W
			Introduction to the scientific method and systems							
			thinking in terms of agricultural biology. Develop a							
			hypothesis based on field observations, collect and analyze data. Prepare to become agricultural biology							
		Agricultural Biology -Transfer	professionals by designing resumes and practicing							
Agricultural Biology	AB 270	Orientation	skills to succeed in a professional environment.		Yes		Yes			
			Introduction to the scientific method and systems							
			thinking in terms of agricultural biology. Develop a hypothesis based on field observations, collect and							
			analyze data to determine if findings align with the							
			hypothesis. Results are communicated in a written							
Agricultural Biology	AB 130	Agricultural Biology Data	report, and oral presentation.		Yes		Yes			
			Knowledge, skills, and abilities to propose sustainable							
			solutions to biological problems in natural or managed							
			ecosystems. Collectively discuss a diverse set of case							
		Applications in Agricultural	studies that incorporate systems approach in solving agricultural biology issues. Hone career plans and							
Agricultural Biology	AB 330	Biology I	professional skills.	Yes			Yes			
Agricultural Biology	BSPM 361	Elements of Plant Pathology	Diseases of economic plants.	Yes				Yes		
		laterated Tare Health								
Agricultural Biology	BSPM 365	Integrated Tree Health Management	Insects and diseases in forest and urban ecosystems. Effects, diagnosis, prevention, and interactions.	Yes			Yes		Yes	
Agricultural biology	D31 W 303	ivianagement	Effects, diagnosis, prevention, and interactions.	163			163		163	
			Principles of plant-microbe/insect interactions,							
		Molecular Plant-Microbe	physiological and molecular aspects of plant defense,							
Agricultural Biology	BSPM 450	Interaction	genomics approaches to study plant defense.		Yes					Lecture(s), Assignments(s)/Graded Deliverable(s)
		Livertonic Mana								Lecture(s), Guest
		Livestock Manure Management and	Manure management; maximizing benefits to soils and crops; minimizing air and water quality hazards;							speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module
Animal Sciences	ANEQ 448	Environment	complying with regulations.	Yes			Yes		Yes	or Unit,Lab(s),Discussion/Recitation
			Understanding of nutrients and nutrient function						1	,,(-,,,, redication
			required to support animal life through all						1	
Animal Sciences	ANEQ 320	Principles of Animal Nutrition	physiological states.		Yes		Yes		Yes	Lecture(s), Discussion/Recitation
Animal Cainana	ANIEC 2001	Candatasi Cale AA	Diagrica and supporting a second support				V		V	
Animal Sciences	ANEQ 300V	Seedstock Sale Management Topics: Seedstock Sale	Planning and executing a purebred livestock sale.				Yes		Yes	
Animal Sciences	ANEQ 300U	Management	Plan and promote a purebred livestock sale.				Yes		Yes	
			Overview of beef seedstock industry, including							
Animal Sciences	ANEQ 300N	Merchandising	selection, management, and marketing of livestock.		Yes				Yes	

			Human rights from the perspective of cultural						
			anthropology through its theoretical and practical						
			dimensions. Contemporary human rights debates						
			within the context of cultural plurality in a globalized						
			world. Engages the intersection between global						
			dynamics and community experiences by addressing						
			the human rights dimensions of refugees and						
		Anthropology of Human	migration, indigenous communities, women and						
Anthropology & Geography	ANTH 317	Rights	children, health, religious practices, among others.	Yes	Yes			Yes	
									Lecture(s), Assignments(s)/Graded
			Art expression is a defining factor in cultural identity						Deliverable(s),Readings/Video/Podcast,Module
			and representation in a modern world where						or Unit,Discussion/Recitation,Other (please
Anthropology & Geography	ANTH 336	Art and Culture	geographical and political borders are diminishing.			Yes		Yes	describe): museum tours
Antinopology & Geography	ANTH 330	Art and Culture	geographical and political borders are diffillisting.			165		165	describe). Illuseum tours
			Geographic analysis of cultural phenomena, elements						
			emphasizing human-land relationships and spatial						
Anthropology & Geography	GR 320	Cultural Geography	patterns of agriculture, cities, language, religion.	Yes	Yes			Yes	
			Analyze diversity of smaller-scale societies, and						Lecture(s), Assignments(s)/Graded
		Cultures and the Global	cultural responses and adaptations to emerging global						Deliverable(s),Readings/Video/Podcast,Module
Anthropology & Geography	ANTH 200	System	trends.	Yes		Yes		Yes	or Unit
									Lecture(s),Guest
									speaker(s),Assignments(s)/Graded
			Cultural resource laws and policy; practices commonly						Deliverable(s),Readings/Video/Podcast,Discussio
		Haritaga Dasaursa	employed in management and preservation of these						n/Recitation,Service Learning/Community
A	441711 470	Heritage Resource						v	
Anthropology & Geography	ANTH 478	Management	diverse resources.	Yes		Yes		Yes	Service
			Anthropological/Geographical theory from its						Lecture(s), Assignments(s)/Graded
		History of Theory -	beginnings with Aristotle through recent						Deliverable(s),Readings/Video/Podcast,Module
Anthropology & Geography	ANTH 400	Anthropology and Geography	developments into the 20th century.	Yes		Yes			or Unit
			Explore human diversity, both physical and genetic,						
			within an evolutionary framework. The scientific						
			method is applied to the sociocultural contexts that						
			give rise to prejudices in order to critically evaluate						
			misconceptions regarding race, gender, and human						
			behaviors deemed 'natural'. Approaching human						
			diversity from an evolutionary perspective dismantles						
			biases that justify prejudice and result in unequal						
			access to power and resources as well as negative						
Anthropology & Geography	ANTH 274	Human Diversity	health impacts.	Yes	Yes			Yes	
									Lecture(s),Guest
			Roles of technology, economics, social organization,						speaker(s), Assignments(s)/Graded
			and ideology in human adaptations to and survival in						Deliverable(s),Readings/Video/Podcast,Module
Anthropology & Geography	ANTH 330	Human Ecology	natural and cultural environments.	Yes	Yes				or Unit,Discussion/Recitation
				-	1				Lecture(s),Assignments(s)/Graded
			Native American peoples, their cultural variation		1		1		Deliverable(s),Readings/Video/Podcast,Module
		la la constantina	across the continent, and cultural encounters with			V		V	or Unit,Discussion/Recitation,Other (please
Anthropology & Geography	ANTH 412	Indians of North America	colonial expansion.	 Yes		Yes		Yes	describe): museum tours
			Human societies and their cultural setting; variation in						Lecture(s), Assignments(s)/Graded
		Introduction Cultural	beliefs, social customs, and technologies; human						Deliverable(s),Module or
Anthropology & Geography	ANTH 100	Anthropology	differences in anthropological terms.	Yes		Yes		Yes	Unit,Discussion/Recitation
			Major geographic themes applied to selected regions;						Lecture(s),Assignments(s)/Graded
			physical environment, human-land relationships,						Deliverable(s),Readings/Video/Podcast,Discussio
Anthropology & Geography	GR 100	Introduction to Geography	regional analysis.	Yes		Yes		Yes	n/Recitation
, 5,,									
		Advanced Typography/Design	Two- and three-dimensional solutions for advertising,						Lecture(s),Assignments(s)/Graded
Art & Art History	ART 455	Systems	corporate identity, packaging, and publication design.	Yes		Yes		Yes	Deliverable(s), Discussion/Recitation
				1		1.25		1	

	I		T	1		1	T
			Projects in editorial and reportorial illustration				
			emphasizing techniques applied to solving problems in				
			advanced composition. Students are encouraged to				A i t - (-) (C d d
Art C Art Hinton	A D.T. 45.C	A disease and Illicontractions	infuse their own commitments into the spectrum of sustainability and service.	V	V	V	Assignments(s)/Graded
Art & Art History	ART 456	Advanced Illustration		Yes	Yes	Yes	Deliverable(s), Discussion/Recitation
Art & Art History	ART 110	Global Art History I	Art and architecture of the ancient world.		Yes		
		Historiography/Methodolgy-	Historiography/methodology/research methods in art				
Art & Art History	ART 419	Art History	history.		Yes		
		History of Baroque/Rococo					
Art & Art History	ART 414	Art	17th- and 18th-century visual arts.		Yes		
			Problems emphasizing media, experimental				Lecture(s), Assignments(s)/Graded
Art & Art History	ART 356	Illustration	techniques, and compositions.	Yes	Yes		Deliverable(s), Discussion/Recitation
							Lecture(s), Assignments(s)/Graded
							Deliverable(s),Readings/Video/Podcast,Module
Art & Art History	ART 100	Introduction to Visual Arts	Exploration of the development of visual arts.	Yes	Yes	Yes	or Unit, Discussion/Recitation
							Lecture(s),Guest
		Painting Methods and	Continuing development of technical skills in oil				speaker(s),Readings/Video/Podcast,Discussion/R
Art & Art History	ART 360	Materials	painting through the use of conceptual prompts.	Yes	Yes		ecitation
,	1		Artistic and architectural traditions of major ancient				
			civilizations in Mesoamerica, including the Olmecs,				
			Maya, Teotihuacanoes, Mixtecs, and Aztecs, from				
		Pre-Columbian Art	1200 bce until the sixteenth-century conquest by				
Art 9 Art History	ART 312	Mesoamerica			Voc		
Art & Art History	AK1 312	iviesoamerica	Spain.		Yes		
							Lecture(s),Guest
							speaker(s),Readings/Video/Podcast,Lab(s),Discus
							sion/Recitation,Service Learning/Community
							Service,Other (please describe): Focus is on non-
			Preparation, processing, and printing techniques in				toxic and sustainable materials research apart
Art & Art History	ART 365	Printmaking II-Lithography	stone and metal plate lithography.	Yes	Yes	Yes	from petroleum distillates
		Professional Practices	Skills and tools beneficial in pursuing professional				Lecture(s),Readings/Video/Podcast,Module or
Art & Art History	ART 392	Seminar	and/or academic goals in the visual arts.		Yes	Yes	Unit
		Typography and Design	Emphasis on typographic solutions for advertising,				Lecture(s), Assignments(s)/Graded
Art & Art History	ART 355	Systems	corporate identity, packaging, and publication design.	Yes	Yes	Yes	Deliverable(s), Discussion/Recitation
·		·					Lecture(s), Quizzes, Other: societal and economic
		Comprehensive Biochemistry	Metabolic pathways and their regulation; cellular				aspects of human disease are incorporated into
Biochemistry & Molecular Biology	BC 403		biochemistry.		Yes	Yes	course content
						1.00	
			The interface between animal behavior and				Lecture(s),Guest
		Animal Behavior &	conservation biology, exploring how behavioral tools				speaker(s),Readings/Video/Podcast,Discussion/R
Biology	BZ 430	Conservation	can be applied to conservation problems.	Yes			ecitation
biology	BZ 430	Conservation	can be applied to conservation problems.	163			ecitation
			Evalution of the anatomical marphalogical				
			Evolution of the anatomical, morphological,				
			physiological and ecological characteristics of				
			vertebrate animals. Provides foundation for advanced				
			training in ichthyology, herpetology, ornithology and				
			mammalogy. Includes a dissection-based lab to				
			provide in-depth exploration of the external and				
			internal anatomy of the nine extant classes of				
Biology	BZ 214	Animal Biology-Vertebrates	vertebrates.	Yes	Yes	Yes	Lecture(s), Guest speaker(s), Discussion/Recitation
							Lecture(s), Assignments(s)/Graded
			Levels of organization, stability, and change in living				Deliverable(s),Readings/Video/Podcast,Discussio
Biology	LIFE 102	Attributes of Living Systems	systems.	Yes			n/Recitation
=-		<i>y</i> ,,,,,,	Diversity of animals and plants; their structural and				
Biology	LIFE 103	Biology of Organisms	functional characteristics.	Yes			Lab(s)
01	100						\-/-/

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		Developmental Plant	Developmental aspects of growth and differentiation							Lecture(s),Readings/Video/Podcast,Discussion/R
Biology	BZ 331	Anatomy	stressed in higher plants and animals.		Yes				Yes	ecitation
Diology	52 331	Anatomy	Interrelationships among organisms and their		163				163	Lecture(s),Assignments(s)/Graded
			environments using conceptual models and							Deliverable(s),Readings/Video/Podcast,Module
Biology	LIFE 320	Ecology	quantitative approaches.		Yes					or Unit
			Integration of evolutionary biology with behavior,							
			genetics, and ecology to understand health and							
			disease. Exploration of insights into medical research							
			and practice (diagnosis and therapy) and human							
			health from an evolutionary standpoint. Fundamentals							
			of evolution, and the importance of evolutionary							
			biology in understanding the ultimate and proximate causes of human disease. Engage in scientific							Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussio
Biology	BZ 420	Evolutionary Medicine	discourse.		Yes		Yes			n/Recitation
ыогоду	BZ 420	Evolutionally iviedicine	uiscourse.		165		ies			ily Necitation
			Develop a novel dataset to compare present species							
			distributions, using resources such as iNaturalist							
			and/or field observations, with historical distributions							
			using digitized natural history collections data. This							
			experience develops skills in data analysis using data							
			collected from portals such as GBIF and iDigBio, as							
			well as tools including Excel, R, and QGIS and results in							Lecture(s), Assignments(s)/Graded
			novel, publishable research on the impact of global							Deliverable(s),Readings/Video/Podcast,Other
Biology	BZ 381A2	Exploring Range Shifts	change on species distributions.	Yes						(please describe): independent research
										Lecture(s),Guest
										speaker(s),Assignments(s)/Graded
										Deliverable(s),Readings/Video/Podcast,Module
Biology	BZ 220	Introduction to Evolution	Fundamental concepts in evolutionary biology.		Yes					or Unit,Other (please describe): the Conservation unit covered sustaibility
ыогоду	BZ ZZ0	Introduction to Evolution	rundamental concepts in evolutionally biology.		165					Lecture(s),Guest
										speaker(s),Assignments(s)/Graded
										Deliverable(s),Readings/Video/Podcast,Discussio
Biology	BZ 415	Marine Biology	Marine organisms, habitats, and communities.		Yes		Yes		Yes	n/Recitation
<u> </u>		<i>.</i>	, ,							Lecture(s),Guest
			Taxonomy, evolution, morphology, physiological							speaker(s),Readings/Video/Podcast,Discussion/R
Biology	BZ 475	Marine Mammalogy	adaptations, behavior, and ecology of marine animals.		Yes		Yes		Yes	ecitation
			Introduction to molecular genetic markers for							
			questions in ecology, evolution, behavior, and							Lecture(s), Assignments(s)/Graded
Biology	BZ 425	Molecular Ecology	conservation.		Yes					Deliverable(s), Discussion/Recitation
Biology	BZ 450	Plant Ecology	Relation of plants to their environment.		Yes					Lecture(s)
			Principles and methods of classification, zoological							
Rieleny	D7 424	Dringiples Customatic 71	nomenclature, taxonomic decisions regarding species				Vas			Lastura(s) Dissussion (Positation
Biology	BZ 424	Principles-Systematic Zoology	and higher categories.				Yes			Lecture(s), Discussion/Recitation Lecture(s), Assignments(s)/Graded
						1				Deliverable(s),Readings/Video/Podcast,Discussio
Biology	BZ 471	Stream Biology and Ecology	Biology and ecology of running waters.	1	Yes		Yes			n/Recitation
5.0061	JE 471	St. Ca.ii Biology and Ecology	Storage and ecology of running waters.							in residual.
			Principles and methods for building, analyzing, and							
		Theory of Population &	interpreting mathematical models of ecological and							Lecture(s), Assignments(s)/Graded
Biology	BZ 348	Evolutionary Ecology	evolutionary problems in biology.		Yes					Deliverable(s),Lab(s)
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Biomedical Sciences	BMS 401	Lab Research in Biomedical Sciences	Hands-on experience in laboratory research methods for students working individually on a project which stems from a larger research project of a faculty member's laboratory. All students will work in the same facility equipped with appropriate equipment and supplies to conduct the student research proposal.		Yes			Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
								Lecture(s),Guest
0.1	DUC 400		Overview of functional areas of business: accounting, finance, information systems, management,				W	speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussio
Business	BUS 100	Introduction to Business	marketing, and international business.		Yes	Yes	Yes	n/Recitation Lecture(s),Assignments(s)/Graded
Business	BUS 479	Strategic Management	An integration of various business subject areas in terms of top-level policy and decision making.		Yes	Yes	Yes	Deliverable(s),Readings/Video/Podcast,Service Learning/Community Service
Business	503 473	Strategic Wanagement	terms of top lever policy and decision making.		ies	103	103	Lecture(s),Guest
		Chemical & Biological	Projects requiring students to design a chemical and/or biological process with cost estimation and					speaker(s),Assignments(s)/Graded Deliverable(s),Module or
Chemical & Biological Engineering	CBE 452	Engineering Design II	constraint analysis; written and oral reports. Mechanisms and rates of chemical reactions; design of		Yes	Yes	Yes	Unit,Discussion/Recitation
		Chemical & Biological	homogeneous and heterogeneous reactors; biological					
Chemical & Biological Engineering	CBE 320	Reactors	reactions and reactors.		Yes			Assignments(s)/Graded Deliverable(s)
Chemical & Biological Engineering	CBE 205	Fundamentals of Biological Engineering	Introduction to the application of the principles of engineering and biology to the analysis, design, and optimization of bioprocesses.		Yes			Lecture(s)
								-55535(6)
Chemical & Biological Engineering	CBE 101A	Introduction to CBE: Lecture	Overview of fundamentals of chemical and biological engineering, including conservation and rate processes, transport phenomena, engineering design and problem solving, and applications.		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s)
Chemistry	CHEM 301	Advanced Scientific Writing- Chemistry	Advanced scientific writing using the read-analyze- write approach to writing scientific journal articles.		Yes	Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Other (please describe): Sustaibility features in this course through one writing assignment
Chemistry	CHEM 103	Chemistry in Context	Chemistry, chemical principles from more conceptual, less mathematical perspective; how chemical substances, chemical reactions affect our daily lives.	Yes				Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit
		Chemistry of Hemp and	Examine characteristics of cannabis chemical families and the pharmacological properties. Study the methods for isolation, separation, processing and the transformation into commercial products within the context of chemical principles. Examine analytic					Lecture(s),Lab(s),Other (please describe): similar
Chemistry	CHEM 442	Cannabis	techniques for quantitation. Fundamental aspects of chemistry and chemical		Yes	Yes	Yes	to other courses reported here.
		Foundational Modern	principles, with an emphasis placed on modern atomic and molecular structure theory, structure and					
Chemistry	CHEM 120	Chemistry	reactivity.		Yes			Lecture(s)
Chamistry	CHEM 242	Foundations Organic	Laboratory applications of organic chemistry		Yes			Madula or Unit Lab(s)
Chemistry	CHEIVI 242	Chemistry Lab	principles. Quantum mechanics; molecular structure and		162			Module or Unit,Lab(s)
		Fundamentals of Physical	spectroscopy; statistical and equilibrium					Lecture(s), Assignments(s)/Graded
Chemistry	CHEM 371	Chemistry	thermodynamics; kinetics.	1	Yes			Deliverable(s), Module or Unit

Chemistry	CHEM 372 CHEM 111	Fundamentals of Physical Chemistry Lab General Chemistry I	Laboratory experiments illustrate the Fundamentals of Physical Chemistry, including atomic and molecular spectroscopy, thermochemistry, chemical equilibrium, and kinetics. Fundamental aspects of chemistry and chemical principles; emphasis on structure, bonding, and stoichiometry. Acid/base equilibria, kinetics, thermodynamics, solubility, oxidation-reduction reactions,		Yes	Yes	Yes Yes	Lecture(s),Lab(s),Other (please describe): In the context of an advanced laboratory course the ethos o sustaibility permeates all of the activities. One notable example is the greatest attention to minimization of chemical useage and waste. No educatiol value is compromised while instilling the importance of responsible usage. Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Chemistry	CHEM 113	General Chemistry II	electrochemistry, selected topics.		Yes	Yes		Deliverable(s),Readings/Video/Podcast
Chemistry	CHEM 192	Introductory Seminar/Chemistry	Small-group discussions of aspects of chemistry.		Yes			Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Chemistry	CHEM 477	Physical Chemistry Lab II	Physiochemical experiments; emphasis on thermodynamics/statistical mechanics/kinetics; interpretation/presentation of data; formal lab reports.		Yes	Yes	Yes	Lecture(s),Lab(s),Other (please describe): In the context of an advanced laboratory course the ethos of sustainability permeates all of the activities. One notable example is the greatest attention to minimization of chemical useage and waste. No educational value is compromised while instilling the importance of responsible usage.
			Hydrologic cycle, soil moisture, groundwater, runoff					
			processes, applications in water resources and					
Civil & Environmental Engineering	CIVE 322	Basic Hydrology	environmental engineering.	Yes		Yes	Yes	
		Design of Reinforced	Design and behavior of reinforced concrete structural					Assignments(s)/Graded
Civil & Environmental Engineering	CIVE 467	Concrete Structures	members.		Yes			Deliverable(s),Readings/Video/Podcast
Civil & Environmental Engineering	CIVE 103	Engineering Graphics & Computing	Introduction to the profession and academia; principles of civil engineering design; graphical, and written communication.		Yes	Yes	Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Other (please describe): International design competition focused on building a sustainable community addressing the UN Sustainable Development Goals
Civil & Environmental Engineering	CIVE 339	Environmental Engineering Concepts	Fundamental topics of environmental engineering, including water chemistry, chemical and biological reactions for water and wastewater treatment, reactor design for water and wastewater treatment processes, sanitary and storm sewer design, hazardous waste management, noise pollution, and sanitary landfill design.	Yes		Yes	Yes	
			Fluvial geomorphology, river hydraulics, sediment					
		Environmental River	transport, and river response with special emphasis on					
Civil & Environmental Engineering	CVE 413	Mechanics	environmental aspects.	Yes		 		
Civil & Environmental Engineering	CIVE 302	Evaluation of Civil Engineering Materials	Behavior and properties of construction materials, instrumentation, use of statistical tools, material standards, material selection, quality control. Fluid properties; statics, kinematics, and dynamics of		Yes	Yes	Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit
			fluid motion including viscous and gravitational					
Civil & Environmental Engineering	CIVE 300	Fluid Mechanics	effects.		Yes		Yes	Lecture(s), Discussion/Recitation
								,,,,

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Civil & Environmental Engineering	CIVE 438	Fundamentals of Environmental Engineering	Core topics of environmental engineering including water quality and chemistry, wastewater removal and treatment, air pollution, noise pollution, and sanitary landfill design. Sustainability, green engineering and ethics are also discussed.	Yes		Yes			Yes	
Civil & Environmental Engineering	CIVE 303	Infrastructure & Transportation Systems	Principles of infrastructure systems, transportation systems, applications of spatial data and GIS, project management and engineering economy.		Yes	Yes			Yes	
Civil & Environmental Engineering	CIVE 102	Introduction to Civil and Environmental Engineering	Civil and environmental engineering professions, computer applications related to civil and environmental engineering; engineering design concepts.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Other (please describe): major design project
Civil & Environmental Engineering	CIVE 441	Water Quality Analysis & Treatment	Physical, chemical and biological methods for the characterization of waters and wastewaters.	Yes			Yes		Yes	
Communication Studies	SPCM 408		Skills development and direct experience in convening, facilitating, and reporting public forums tied to Center for Public Deliberation activities.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service
Communication Studies	SPCM 100	Communication & Popular Culture	Survey of media studies approaches to understanding popular culture.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Communication Studies	SPCM 436	Conflict Management & Communication	Theories and principles of communication in conflict management; application to conflict resolution situations.			Yes				
Communication Studies	SPCM 180A2	Dialogue and Difference	Improve dialogue and listening skills so students can better engage diverse perspectives in their everyday lives. Explores how diverse identities, life stories, and worldviews create our larger relational communities. These communication skills are applied to everyday interactions through listening and dialogue across difference in online and face-to-face contexts.			Yes				
Communication Studies	SPCM 200	Public Speaking	Fundamentals of public speaking emphasizing content, organization, delivery, audience response.		Yes		Yes		Yes	Lecture(s),Readings/Video/Podcast,Module or Unit,Other (please describe): When students self- select and present these topics to their peers
Communication Studies	SPCM 130	Relational & Organizational Communication	Basic communication processes and skills central to relating and organizing in interpersonal, small group, and organizational contexts.			Yes				
Computer Information Sciences	CIS 370	Business Analytics	Concepts, processes, techniques, and tools to extract, cleanse, organize, transform, store, analyze, and visualize data to support business decision making.				Yes		Yes	Assignments(s)/Graded Deliverable(s)
Construction Management	CON 465	Construction Management Professional Practices	Professional practice using an understanding of the contractual and working relationships among all participants in the design/construction process.		Yes					Lecture(s), Discussion/Recitation
Construction Management	CON 101	Introduction to Construction Management	Introduction to the construction industry; including methods, practices, trends, careers, and constituencies involved in the design and construction process.		Yes				Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit
Design & Merchandising	AM 110	Apparel & Merchandising Digital Technology	Introduction to computer technologies used in apparel and merchandising industries.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Lab(s)

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Design & Merchandising	AM 446	Apparel Design and Production	Computer-aided design (CAD) technology used in apparel sketching, pattern drafting, grading and marker making; final portfolio preparation and review.	Yes		Yes	Yes	Module or Unit
			Health, safety, and wellness issues in interiors,					
Docian & Marchandising	INTD 350	Codes-Health and Safety	including laws, codes, standards, regulations, and	Vos				Lastura(s) Cuart speaker(s)
Design & Merchandising	IN 1D 350	Codes-Health and Safety	guidelines.	Yes				Lecture(s),Guest speaker(s)
Design & Merchandising	AM 342	Computer-Aided Textile Design	Ethnic textile design traditions and current approaches to textile production in industry and in individual design studios; computer-aided technology and multicultural research used to create repeat, knit, and woven textile designs.	Yes		Yes	Yes	Lecture(s),Guest speaker(s),Module or Unit
			Analysis and avaluation of psychological social					Guest speaker(s), Assignments(s)/Graded
		Consumers in the	Analysis and evaluation of psychological, social, economic, sustainability, and cultural factors that					Deliverable(s),Readings/Video/Podcast,Discussio
Design & Merchandising	DM 272	Marketplace	influence consumers in the marketplace.	Yes		Yes	Yes	n/Recitation
Design & Merchandising	INTD 410	Evidence-based Design Theory	Theory and application of evidence-based design processes including research, development, and presentation of a programming proposal for a large scale interior project.	Yes	Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Design & Merchandising	AM 244	Fashion Illustration	Illustration skills using traditional media/computer aided design applications and analysis of visual communication.			Yes		Module or Unit, Discussion/Recitation, Other (please describe): Focusing on diversity, equity, and inclusion in fashion illustration fashion figures. Including race, ethnicity, body size, differently abled, adaptive clothing, skin conditions, hair culture, etc.
								Lecture(s),Assignments(s)/Graded
			Fashion designers and manufacturers who established					Deliverable(s),Readings/Video/Podcast,Module
Design & Merchandising	AM 364	History of Fashion Designers	the field and their contemporaries.			Yes	Yes	or Unit
Design & Merchandising	AM 346	Line Development and Planning	Use of computer-aided design software to transfer apparel design concepts to garment pattern completion. Develop ideation sketches, fashion illustrations, technical flat drawings, and garment patterns for an original design line.			Yes		Lecture(s), Discussion/Recitation
Design & Merchandising	AM 341	Patternmaking III - CAD	Computer-aided design (CAD) technology used in apparel sketching, pattern drafting, grading, and marker making.	Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Lab(s),Other (please describe): Using CAD technologies to improve efficiency in apparel production process
			Examination of retailing principles and practices, including merchandise management, retailing strategy, supply chain management, store					Lecture(s),Guest speaker(s),Assignments(s)/Graded
Design & Merchandising	DM 360	Retailing	management, and sustainable retail operations.	Yes		Yes	Yes	Deliverable(s),Readings/Video/Podcast
			Applications of creative problem-solving, digital and design skills to develop innovative interior design					
		Studio IV Interior Architecture	projects with a focus on medium-scale commercial					
Design & Merchandising	INTD 376	and Design	interiors.	Yes		Yes		Lecture(s)

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Design & Merchandising	AM 220		Introduction to textiles – fibers through finished fabrics and related applications to fashion, home goods, interior design, and related industries. Emphasis on fiber characteristics, yarns, woven and knit fabrics, dyeing, printing, and finishes. Discussion on environmental concerns, care and renovation, fabric innovations, quality issues, and global laws that regulate textiles.		Yes	Yes		Yes	
Design & Merchandising	AM 335		Managing the flow of materials, information, and finances as they move in a process from supplier to retailers and consumers in a global environment.		Yes		Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Communication Studies	IDEA 310G	Infographics	Employ design theories and methods to infographic projects that promote "iterative tinkering" through exploration of various design processes.		Yes		Yes	Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Service Learning/Community Service
Communication Studies	IDEA 210		Design thinking is a creative, flexible process that fosters innovation. Content and projects promote building creative competence and an appreciation for thinking across disciplines to develop a new mindset and skillset that guides innovation. Learning tools to develop compelling ideas for meaningful societal and marketplace impact will be explored.				Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Module or Unit,Service Learning/Community Service
Communication Studies	IDEA 310N		Employing design thinking theories and methods to projects using post-digital imaging that promotes "iterative tinkering" through the exploration of various design processes related to screen-printing and other forms of post-digital imaging.		Yes		Yes	Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Lab(s), Discussion/Recitation
Economics	ECON 436		Develop a range of forecasting skills to become an effective forecaster in both the private and public sectors. Focus on the acquisition of time series data that comes from a number of government and semi-private websites, and on the three most popular econometric techniques used in forecasting: univariate, vector autoregressive (VAR) and vector error correction (VECM) models.		Yes		Yes	Yes	Lecture(s), Discussion/Recitation
			Impact of taxes, government expenditures on allocation of resources, distribution of income; evaluation of government expenditure program, tax		ies				Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module
Economics	ECON 320	Economics of Public Finance Intermediate	policies. Theory of national income, its measurement and determinants; analysis of inflation, growth, debt, and				Yes	Yes	or Unit, Discussion/Recitation
Economics	ECON 304	Macroeconomics	public policy. Analysis of competitive and noncompetitive markets		Yes			Yes	Lecture(s),Module or Unit Lecture(s),Readings/Video/Podcast,Discussion/R
Economics Economics	ECON 306		in terms of efficiency of resource utilization. Determinants of national output, employment, and price level; inflation and unemployment; fiscal and monetary policy.		Yes		Yes	Yes	ecitation Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussio n/Recitation
Engineering	ENGR 101		National Academy of Engineering's Grand Challenges in Engineering: overview, roles of engineering disciplines, engineering and societal challenges.	Yes			Yes	Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Module or Unit,Lab(s)

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			Provides each incoming cohort of Scott Scholars the					
			tools and opportunity to build a sense of community,					
			The state of the s					
			create a strong network, develop leadership and					
			professionalism skills, connect with the continuing					
			Scott Scholar cohorts, and learn the importance of					1. 1. 1/10
			giving back to the Colorado State University					Lecture(s),Guest
			community and every community in which they					speaker(s),Assignments(s)/Graded
Engineering	ENGR 181A2	Scott Scholars Seminar	participate.			Yes		Deliverable(s), Discussion/Recitation
			Dringiples of technology based entroprenousship					
			Principles of technology-based entrepreneurship,					
			including recognizing, analyzing, and acting on					
		L	technology-based business opportunities; and	l.,				
Engineering	ENGR 422	Technology Entrepreneurship	development of an opportunity analysis.	Yes		Yes	Yes	Lecture(s),Guest speaker(s)
								Assignments(s)/Graded
			Academic writing, critical thinking, and critical reading					Deliverable(s),Readings/Video/Podcast,Discussio
English	CO 130	Academic Writing	through study of a key academic issue.	Yes		Yes	Yes	n/Recitation
			L					
			Understanding and writing for rhetorical situations;		1			Lecture(s),Assignments(s)/Graded
			critical reading and response; writing source-based					Deliverable(s),Readings/Video/Podcast,Module
English	CO 150	College Composition	argument for academic and public audiences.	Yes		Yes	Yes	or Unit,Discussion/Recitation
		Creative Writing						
English	E 412C	Workshop:Nonfiction	Individual projects with group discussion and analysis.			Yes		Readings/Video/Podcast
			Foundations of language structure, emphasizing					Lecture(s),Assignments(s)/Graded
		English Language for Teachers	grammar, sounds, spelling, word structure, linguistic					Deliverable(s),Readings/Video/Podcast,Module
English	E 322	I	variation, usage, acquisition, and pedagogy.			Yes		or Unit,Discussion/Recitation
			Introduces majors to the study of English across the					
			whole array of the department's concentrations and					Lecture(s),Readings/Video/Podcast,Discussion/R
English	E 181A1	English Studies Symposium	approaches.	Yes		Yes	Yes	ecitation
		International Graduate	Academic English for international graduate students					Other (please describe): Diversity, culture shock,
		Student Success	with emphasis on both academic reading and					and academic expectations around these issues
English	EAP 152	Advancement	research.	Yes		Yes	Yes	is sometimes discussed
			Development of critical skills necessary to understand					Lecture(s),Readings/Video/Podcast,Discussion/R
English	E 240	Introduction to Poetry	and enjoy poetry.	Yes		Yes	Yes	ecitation
			Variable topics exploring discourses of law and justice					
			using approaches such as rhetoric, linguistics,					
English	E 480A3	Language, Law, and Justice	education, literature, cultural studies etc.		Yes			
								Lecture(s), Assignments(s)/Graded
								Deliverable(s),Readings/Video/Podcast,Module
English	E 334	LGBTQ+ Literature	Literature by LGBTQ+ authors or with LGBTQ+ themes.		Yes			or Unit,Discussion/Recitation
			Non-fiction, fiction, and poetry on landscape, climate,					
English	E 339	Literature of the Earth	animality, ecology, place.	Yes		Yes		
								Lecture(s),Guest
			Exploring literacy through writing theory; specific					speaker(s), Assignments(s)/Graded
			issues of cultural difference, gender, technology,					Deliverable(s), Readings/Video/Podcast, Module
English	E 406	Topics in Literacy	acquisition, school, and workplace.		Yes		Yes	or Unit,Discussion/Recitation
								Lecture(s), Assignments(s)/Graded
			Reading, analyzing, researching, and writing		1			Deliverable(s),Readings/Video/Podcast,Module
English	CO 300	Writing Arguments	arguments.	Yes		Yes	Yes	or Unit,Discussion/Recitation
								Other (please describe): Students in this class are
								social science students. They have the ability to
								choose topics related to that to write about, and
								they most often choose topics in these
		Writing in the Discipline:	Learning writing strategies for addressing general					categories. However, nothing in these categories
English	CO 301C	Social Sciences	audiences in social sciences.	Yes		Yes	Yes	is explicitly taught.
	CO 301C	Social Sciences	addictions in social sciences.			103		is explicitly taught.

	I			I	1			1	T	1
			Preventing and managing hazards from air pollution							Lecture(s), Assignments(s)/Graded
Environmental & Radiological Health		Environmental Health - Air	sources and handling waste; administrative							Deliverable(s),Readings/Video/Podcast,Module
Sciences	ERHS 410	and Waste Managament	management for air and waste programs.	Yes			Yes		Yes	or Unit,Discussion/Recitation
			Identify natural and man-made contaminants that							Lecture(s),Guest
			impact water quality and human health; biological,							speaker(s), Assignments(s)/Graded
Environmental & Radiological Health		Environmental Health Water	chemical, and physical treatment techniques used to							Deliverable(s),Readings/Video/Podcast,Discussio
Sciences	ERHS 320	Quality	protect water quality.		Yes		Yes			n/Recitation
			Pathways of exposure and behavior of environmental							
Environmental & Radiological Health			contaminants. Exposure assessment in environmental							
Sciences	ERHS 448	Environmental Contaminants	health protection.		Yes					Lecture(s), Assignments(s)/Graded Deliverable(s)
										Lecture(s), Assignments(s)/Graded
Environmental & Radiological Health			Overview of the human diseases which are associated							Deliverable(s),Readings/Video/Podcast,Module
Sciences	ERHS 430	Environment	with the environment.		Yes		Yes			or Unit,Discussion/Recitation
Environmental & Radiological Health			Use of epidemiological methods in studying							
Sciences	ERHS 332	Principles of Epidemiology	distribution of diseases in human populations.				Yes			Readings/Video/Podcast,Module or Unit
			Development of Caribbean identities from the arrival							
			of Amerindian groups to the abolition of slavery in the							
Ethnic Studies	ETST 370	Caribbean Identities	nineteenth century.				Yes			Lecture(s)
		C II . II B	British and the British for the U							Lecture(s),Assignments(s)/Graded
51 61 15	FTCT 204 4 4		Principles, concepts, and applications of culturally							Deliverable(s),Readings/Video/Podcast,Module
Ethnic Studies	ETST 281A1	Pedagogy - Relationships	responsive teaching and culturally restorative justice.		Yes	Yes			Yes	or Unit,Discussion/Recitation
			Exploration of the importance of relationships as the							Lastura(s) Assignments(s)/Craded
			focus of education by learning the principles and							Lecture(s), Assignments(s)/Graded
Ethnic Studies	ETST 265		practices of restorative justice, and culturally		Vos	Vos			Vos	Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Etimic Studies	E131 203	Culture of Care in Schools	appropriate teacher practices.		Yes	Yes			Yes	of Offic, discussion, Recitation
			Engages students in dialogue about what it means to							
			be a part of a campus community, a broader							
			community, and the world at large. Explores how							
			diverse identities link us to larger communities beyond							
			the campus. Invites students to enrich self-awareness,							Lecture(s), Assignments(s)/Graded
			explore their own perspectives and those of others,							Deliverable(s), Readings/Video/Podcast, Discussio
Ethnic Studies	ETST 180A1	Sciences	and apply this learning to everyday interactions.		Yes	Yes			Yes	n/Recitation
										,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
										Lecture(s), Assignments(s)/Graded
										Deliverable(s),Readings/Video/Podcast,Module
										or Unit, Discussion/Recitation, Service
			Supervised work experience for Ethnic Studies Majors							Learning/Community Service, Other (please
Ethnic Studies	ETST 487	Ethnic Studies Internship	and Minors.		Yes	Yes			Yes	describe): Internship
										Lecture(s), Assignments(s)/Graded
			Ethnic representation across time as represented in							Deliverable(s),Readings/Video/Podcast,Module
Ethnic Studies	ETST 205	Ethnicity and the Media	auto/biography, fiction, poetry, and popular media.			Yes			Yes	or Unit, Discussion/Recitation
			Integrates the foundational theories and research							Lecture(s), Assignments(s)/Graded
			approaches of ethnic studies to the study and practice							Deliverable(s),Readings/Video/Podcast,Discussio
			of respectfully engaging underrepresented and							n/Recitation,Service Learning/Community
Ethnic Studies	ETST 493	Writing	marginalized communities at the core of the field.		Yes	Yes			Yes	Service
										Lecture(s), Assignments(s)/Graded
			Roles of and interconnections among ethnicity, class,							Deliverable(s),Readings/Video/Podcast,Discussio
Ethnic Studies	ETST 405	Ethnicity/Class/Gender in U.S.	and gender for various groups in the United States.		Yes	Yes			Yes	n/Recitation
			Indian policy processes and their impact on Native							
Ethnic Studies	ETST 444	Federal Indian Law and Policy	lives and culture, particularly Native sovereignty.			Yes			Yes	
			Examination of gender roles in work, education,							Lecture(s),Assignments(s)/Graded
			spirituality, relationships, health, institutions and							Deliverable(s),Readings/Video/Podcast,Discussio
Ethnic Studies	WS 200	Studies	organizations.		Yes	Yes			Yes	n/Recitation

				1					
			Exploration of Indigenous lives and experiences						
		Native American Cultural	through examination of Indigenous architecture, art,						Lecture(s),Readings/Video/Podcast,Module or
Ethnic Studies	ETST 240	Exploration	music, film, activism, and literature.		Yes		Yes		Unit,Discussion/Recitation
Etimo otdales	2.01.2.0	Exploration	masic, min, accounting and incoractarion		1.03		1.03		Lecture(s),Assignments(s)/Graded
			History of Native American peoples in the United						Deliverable(s),Readings/Video/Podcast,Discussio
Ethnic Studies	ETST 255	Native American History	States to the present, including origin stories.		Yes		Yes	Yes	n/Recitation
			Critical analysis of the meaning and development of						Lecture(s), Assignments(s)/Graded
Fabric Cardina	A A A CT 101	Self/Community - American	American culture since 1877, through themes of self		V	V		V	Deliverable(s),Readings/Video/Podcast,Discussio
Ethnic Studies	AMST 101	Culture Since 1877	and community in art, politics, society, and religion.		Yes	Yes		Yes	n/Recitation
			Modern political and socio-economic developments in the Caribbean with emphasis on race, ethnicity, and						
Ethnic Studies	ETST 371	The Modern Caribbean	gender.				Yes		Lecture(s)
Etimo Stadies	2.0.3/2	Advanced Portfolio	Advanced hedging and portfolio management theory				100		Ecotal Clay
Finance & Real Estate	FIN 455	Management	and techniques.		Yes		Yes	Yes	Module or Unit
		Ţ,	·						
			Futures, options and other derivatives, including their						
Finance & Real Estate	FIN 470	Derivative Securities	use in hedging, speculation, and arbitrage.		Yes		Yes	Yes	Lecture(s), Discussion/Recitation
									Lecture(s),Guest
			Basic outdoor skills for FWCB and outdoor novices.						speaker(s), Assignments(s)/Graded
			History of wildlife conservation and reasons for						Deliverable(s), Module or Unit, Lab(s), Service
Fish, Wildlife & Conservation Biology	FW 111	Basic Outdoor Skills in FWCB	declining outdoor participation.		Yes				Learning/Community Service
			Introduction to the principles and the practice of avian ecology and conservation. Class discussions, outdoor						
			labs and field trips emphasize major threats to birds						
			and opportunities for overcoming those challenges.						
			Learn to identify local birds by sight and sound,						Lecture(s),Guest
			employ field methods (e.g., bird banding), participate						speaker(s),Assignments(s)/Graded
			in long-term applied research projects, collect and						Deliverable(s),Readings/Video/Podcast,Module
			analyze data independently, and interact with						or Unit,Lab(s),Discussion/Recitation,Service
Fish, Wildlife & Conservation Biology	FW 468	Bird Ecology and Conservation			Yes		Yes	Yes	Learning/Community Service
									Lecture(s),Guest
									speaker(s), Assignments(s)/Graded
		Conservation & Management	Principles of behavior, ecology, population dynamics,						Deliverable(s),Readings/Video/Podcast,Lab(s),Dis
Fish, Wildlife & Conservation Biology	FW 469	of Large Mammals	and conservation related to large mammals.	Yes			Yes	Yes	cussion/Recitation
			Structured approaches to conservation and						
			management of vertebrates; articulating objectives,						Lecture(s),Guest
			developing management options, and predicting						speaker(s),Assignments(s)/Graded
Fish, Wildlife & Conservation Biology	FW 475	Conservation Decision Making		Yes			Yes	Yes	Deliverable(s), Discussion/Recitation
		Community of Fish in	Ecological processes that create habitat and biotic						
Fish, Wildlife & Conservation Biology	EVA/ 400	Conservation of Fish in Aquatic Ecosystems	template for fish in aquatic ecosystems; human effects; strategies for conserving fishes.	Yes			Yes		
Fish, Wilding & Conservation Biology	F VV 400	Aquatic Ecosystems	Principles and practices to produce food, bait, and	res			res		Lecture(s),Readings/Video/Podcast,Discussion/R
Fish, Wildlife & Conservation Biology	FW 402	Fish Culture	sport fishes.		Yes		Yes		ecitation
rish, triume a conservation sicrogy	102	Introduction to Fishery	Exposure to sampling techniques, agencies, and topics		1.03		1.03		Condition
Fish, Wildlife & Conservation Biology	FW 204	Biology	in fishery biology careers.		Yes				Lecture(s)
-37			5,						Lecture(s),Guest
			Current and emerging issues in fish and wildlife						speaker(s),Assignments(s)/Graded
			conservation and management at the state, national,	1					Deliverable(s),Readings/Video/Podcast,Discussio
Fish, Wildlife & Conservation Biology	FW 472	Issues in Animal Conservation	and global scales.		Yes		Yes	Yes	n/Recitation
									Lecture(s),Guest
			Methods for resolving conflicts caused by wildlife;						speaker(s), Assignments(s)/Graded
		Managing Human-Wildlife	integrating animal behavior, population dynamics,						Deliverable(s),Readings/Video/Podcast,Module
Fish, Wildlife & Conservation Biology	FW 465	Conflicts	economics, and human dimensions into solutions.	Yes			Yes	Yes	or Unit,Lab(s),Discussion/Recitation

T T		ı	Lead to the second of the seco	1	1		I			1
			Introduces students new to the Fish, Wildlife, and							
			Conservation Biology major to curriculum, faculty,							Lecture(s),Guest
			research, key concepts, careers, professional							speaker(s), Assignments(s)/Graded
Fish, Wildlife & Conservation Biology	FW 179	New-to-the-Major Seminar	development, and other students.		Yes		Yes		Yes	Deliverable(s), Discussion/Recitation
										Lecture(s),Guest
										speaker(s), Assignments(s)/Graded
		Principles of Conservation	Review of efforts to study and conserve biological							Deliverable(s),Readings/Video/Podcast,Module
Fish, Wildlife & Conservation Biology	FW 455	Biology	diversity, focused on fish and wildlife populations.	Yes			Yes		Yes	or Unit,Discussion/Recitation
risily villame a conservation storogy		J.O.O.G.	Ecology principles applied to conservation and				103		1.03	Lecture(s),Guest
			management of fish/wildlife resources. Quantitative							speaker(s),Assignments(s)/Graded
		D L CMCI IIIC								
		Principles of Wildlife	methods, socioeconomic factors, population							Deliverable(s),Readings/Video/Podcast,Lab(s),Dis
Fish, Wildlife & Conservation Biology	FW 260	Management	dynamics.	Yes			Yes		Yes	cussion/Recitation
			Apply concepts from life history theory, evolutionary							
			ecology, population ecology, community ecology, and							
			wildlife management to become familiar with the							
			ecology and management of North American							
			waterfowl across their migratory life cycles. Labs and							
										Lastura(s) Assignments(s)/Craded
		Materfoud Feet	field trips will develop practical field skills in waterfowl							Lecture(s), Assignments(s)/Graded
		Waterfowl Ecology	biology, conservation, and management in addition to							Deliverable(s),Readings/Video/Podcast,Lab(s),Dis
Fish, Wildlife & Conservation Biology	FW 430	Management	data analysis and computing skills.	Yes			Yes		Yes	cussion/Recitation
				I		1				
			Analysis methods used in wildlife management and							
		Wildlife Data Collection &	research; adaptive resource management with							
Fish, Wildlife & Conservation Biology	FW 471	Analysis	emphasis on learning through field and computer labs.		Yes		Yes			Lecture(s), Assignments(s)/Graded Deliverable(s)
										Lecture(s),Guest
			Essentials of wildlife ecology as a foundation for							speaker(s),Assignments(s)/Graded
			understanding issues on the origins, management and							Deliverable(s),Readings/Video/Podcast,Module
Fish, Wildlife & Conservation Biology	EW 104	Wildlife Ecology/Conservation		Yes			Yes		Yes	or Unit,Discussion/Recitation
Tish, whalle & conservation blology	1 104	Whalle Ecology/Conservation	conservation of blodiversity.	163			163		163	or orne, discussion, necreation
			Influence of raw material selection, malting, mashing,							
Food Science & Human Nutrition	FTEC 360	Brewing Process	boiling, and fermentation on quality of beverages.		Yes				Yes	Lecture(s),Guest speaker(s),Module or Unit
			Application of scientific and technical aspects of							
			malting, brewing, fermenting, finishing, packaging,							Lecture(s),Guest
Food Science & Human Nutrition	FTEC 422	Brewing Science I	and sensory evaluation of beer.		Yes		Yes		Yes	speaker(s),Lab(s),Discussion/Recitation
			Assessment, quantification, and control of all aspects							
			of commercial beer production from malting through							Lecture(s),Guest
Food Science & Human Nutrition	FTEC 460	Brewing Science II	packaging and dispensing.		Yes		Yes		Yes	speaker(s),Lab(s),Discussion/Recitation
			Influences on nutritional status, assessment of							(-),(-),
			nutrition problems and needs, planning and evaluation							
Food Science & Human Nutrition	FSHN 451	Community Nutrition	of nutrition intervention programs.			Yes				
Food Science & Human Nutrition	F3HIN 431	Community Nutrition	of flutifiloff lifter verition programs.			163				
			Diagning promoting and project-initial backley (from 1)			1				
			Planning, promoting and maintaining healthy life style	I		1				
			and safe learning environment for preschool children.	1		1				
			Nutrition, first aid and safety, physical activity,	I		1				
			identifying and reporting abuse, prevention and	I		1				
			management of acute illness and chronic disease and	1		1				
		ı	promotion of a high-quality indoor and outdoor	I		1				Lecture(s), Assignments(s)/Graded
			promotion or a mgr. quanty macor and outdoor		1	1	1	1		Deliverable(s),Readings/Video/Podcast,Module
,										Deliverable(3), Readings/ Video/ Fodcast, Woodule
Food Science & Human Nutrition	FSHN 445	Early Health Safety Nutrition	environment, targeted for the early childhood				Yes			
Food Science & Human Nutrition	FSHN 445	Early Health Safety Nutrition					Yes			or Unit,Discussion/Recitation
Food Science & Human Nutrition	FSHN 445	Early Health Safety Nutrition	environment, targeted for the early childhood education professional.				Yes			
Food Science & Human Nutrition	FSHN 445	Early Health Safety Nutrition	environment, targeted for the early childhood education professional. Food consumption patterns, individual foods, and				Yes			
			environment, targeted for the early childhood education professional. Food consumption patterns, individual foods, and specific food constituents (nutrients and			Ves	Yes			
	FSHN 445 FSHN 380A1	Early Health Safety Nutrition Food As Medicine	environment, targeted for the early childhood education professional. Food consumption patterns, individual foods, and specific food constituents (nutrients and phytochemicals) associated with health benefits.			Yes	Yes			
			environment, targeted for the early childhood education professional. Food consumption patterns, individual foods, and specific food constituents (nutrients and phytochemicals) associated with health benefits. Safety of human food emphasizing safe production,			Yes	Yes			or Unit, Discussion/Recitation
Food Science & Human Nutrition			environment, targeted for the early childhood education professional. Food consumption patterns, individual foods, and specific food constituents (nutrients and phytochemicals) associated with health benefits.		Yes	Yes	Yes		Yes	

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		Group Study Fermentation	Explore emerging health issues associated with						Lecture(s),Readings/Video/Podcast,Discussion/R
Food Science & Human Nutrition	FTEC 496A	Science: Current Issues	fermented foods and beverages.		Yes		Yes		ecitation
rood soleline & Hamaii Hacileon	1120 150/1	Soletice: Carrette issues	remented roods and severages.		1.03				Condition
			Metabolism of macro and micronutrients; physiologic						
			basis underlying dietary recommendations for human						
			health. Nutrients, dietary requirements for physical						
Food Science & Human Nutrition	FSHN 350	Human Nutrition	well-being; evaluation of various diets.			Yes			Lecture(s)
			Basic nutrition principles and concepts; their						
			application to personal health and interactions with						
Food Science & Human Nutrition	FSHN 150	Survey of Human Nutrition	societal and environmental issues.	Yes		Yes			
									Lecture(s),Guest
			Biological diversity examined in context of species;						speaker(s),Assignments(s)/Graded
			extinction. Principles, techniques of conservation						Deliverable(s),Readings/Video/Podcast,Module
Forest & Rangeland Stewardship	NR 300	Biological Diversity	biology utilized to understand and resolve issues.	Yes			Yes	Yes	or Unit,Service Learning/Community Service
ÿ ,		,	Builds a foundation for cultural competency that						
			embraces human diversity and inclusion, through						
			exploration of the complex historical and						
			contemporary relationships among race, ethnicity,						Assignments(s)/Graded
		Diversity and Inclusion in	culture, socio-economic status, gender, and natural						Deliverable(s),Readings/Video/Podcast,Module
Forest & Rangeland Stewardship	NR 140	Natural Resources	resources.		Yes		Yes		or Unit,Discussion/Recitation
									Lecture(s), Guest
			A l l						speaker(s), Assignments(s)/Graded
			Analysis of environmental factors influencing restoration of disturbed lands and practices for						Deliverable(s), Readings/Video/Podcast, Discussio
Forest & Rangeland Stewardship	RS 478	Ecological Restoration	successful restoration of disturbed ecosystems.	Yes			Yes	Yes	n/Recitation,Service Learning/Community Service
Polest & Rangeland Stewardship	K3 476	Ecological Restoration	successful restoration of disturbed ecosystems.	165			165	Tes	Lecture(s),Assignments(s)/Graded
			Life-supporting and life-fulfilling benefits that nature						Deliverable(s),Readings/Video/Podcast,Module
Forest & Rangeland Stewardship	NR 310	Ecosystem Services	provides to humans; theory, case studies, and policy.	Yes			Yes	Yes	or Unit
		•	Environment and natural resources leadership history,						
		Environment and Natural	skills, and styles. Creation of leadership path and						
Forest & Rangeland Stewardship	NR 375	Resources Leadership	organization prescriptions.		Yes	Yes			
									Lecture(s),Guest
									speaker(s),Assignments(s)/Graded
5 0 0 1 10 11	ND 4204	5	Overview of natural resources environmental concerns				V	w	Deliverable(s),Readings/Video/Podcast,Lab(s),Ser
Forest & Rangeland Stewardship	NR 120A	Environmental Conservation	including population, pesticides, energy, and pollution.		Yes		Yes	Yes	vice Learning/Community Service
			Development of wildlife and fuel management						
Forest & Rangeland Stewardship	NR 440	Fire Economics & Policy	_ ·	Yes			Yes		
Torest & Kangeland Stewardship	1417 440	The Economics & Folicy	economics integrated with critical rederal policies.	163			163		
			Develop a geospatial project from beginning to end,						
			including design, data acquisition and preparation,						
			analysis, and visualization. Various techniques for						
			performing each of these tasks, including both						
			commercial and open source geospatial tools are						
			introduced. Critical thinking, workflow development,						
			and best practices for data management are						
Forest & Rangeland Stewardship	NR 450	Geospatial Project Design	emphasized.		Yes				Lab(s)
Forest & Dangeland Stowardship	NR 322	Introduction -Geographic	Fundamental concepts of spatial data handling and		Vas				Lastura(s) Guast speakar(s) Lab(s)
Forest & Rangeland Stewardship	INU 257	Information Systems	computer-assisted map analysis. Ecology of Rocky Mountains ecosystems. Basic		Yes				Lecture(s),Guest speaker(s),Lab(s) Lecture(s),Assignments(s)/Graded
		Natural Resource Ecology &	measurements and integrated management of natural						Deliverable(s),Readings/Video/Podcast,Module
									Denverable(3), headings/ video/1 odeast, would
Forest & Rangeland Stewardship	NR 220				Yes		Yes		or Unit.Lab(s)
Forest & Rangeland Stewardship	NR 220	Measurements	resources.		Yes		Yes		or Unit,Lab(s) Lecture(s),Assignments(s)/Graded
Forest & Rangeland Stewardship	NR 220				Yes		Yes		or Unit,Lab(s) Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module

										Lecture(s),Guest
			Principles, concepts, and operating examples of							speaker(s),Assignments(s)/Graded
		Natural Resource Policy &	sustainable resource management with a							Deliverable(s),Readings/Video/Podcast,Module
Forest & Rangeland Stewardship	NR 425	Sustainability	concentration on forest policies and practices.	Yes			Yes			or Unit,Discussion/Recitation
			Provides a critical overview of historical events							
			shaping the field of natural resources. Includes							
			contributions from historically marginalized cultural							
			communities with an emphasis on contemporary							
			Indigenous community rights and issues. Gain cultural sensitivity for respectfully engaging diverse ways of							Lecture(s),Guest
			knowing and peoples and for addressing social and							speaker(s),Assignments(s)/Graded
			environmental justice issues in natural resource							Deliverable(s),Readings/Video/Podcast,Module
Forest & Rangeland Stewardship	NR 321	Reconciliation	conservation, stewardship, and management.		Yes		Yes		Yes	or Unit,Service Learning/Community Service
Forest & Natigeratio Stewardship	NK 321	Reconciliation	conservation, stewardship, and management.		res		res		res	or orit, service Learning/Community Service
			Examine how public communication shapes opinion							
			and understanding of natural resource issues.							
			Combines study of key communication concepts with							
			experiential projects, including critique of a public							
			hearing and creation of media products. Through							
			readings, case studies, and assignments, analyze							
			approaches for effective public communication.							
			Design brochures, websites, videos, etc., eventually							
Forest & Rangeland Stewardship	NR 400	Natural Resources	collaborating in teams with real-life 'clients'.		Yes	Yes				
			Vegetation sampling and field measurements							Lecture(s),Guest
			emphasizing applications for monitoring and adaptive							speaker(s),Assignments(s)/Graded
Forest & Rangeland Stewardship	RS 432	Rangeland Measurements	management.		Yes				Yes	Deliverable(s),Module or Unit,Lab(s)
			Identification of characteristic grasses, forbs, and							
Forest & Rangeland Stewardship	RS 312	Rangeland Plant ID Lab	shrubs common to North American rangelands.		Yes					Lab(s)
			Analysis and system of analysis and anatomatica							Guest speaker(s), Assignments(s)/Graded
Forest & Rangeland Stewardship	NR 479	Restoration Case Studies	Analysis and evaluation of ecological restoration projects.	Vos			Vas			Deliverable(s),Readings/Video/Podcast,Discussio n/Recitation
Forest & Rangeland Stewardship	NK 475	Restoration Case Studies	Geophysical exploration methods emphasizing	Yes			Yes			III/RECITATION
			hydrocarbon and mineral exploration, hydrogeology,							Lecture(s), Assignments(s)/Graded
Geosciences	GEOL 442	Applied Geophysics	and engineering applications.		Yes				Yes	Deliverable(s),Lab(s)
		- принад сооринуско			1					Lecture(s),Guest
										speaker(s),Assignments(s)/Graded
										Deliverable(s),Readings/Video/Podcast,Discussio
Geosciences	GEOL 446	Environmental Geology	Geology applied to environmental problems.		Yes		Yes		Yes	n/Recitation
			Develops scientific understanding through							
		Exploring Earth - Physical	introduction to earth processes, materials, resources,							Lecture(s), Assignments(s)/Graded
Geosciences	GEOL 120	Geology	and hazards.		Yes		Yes		Yes	Deliverable(s),Readings/Video/Podcast
			Geosciences as a field of study; exploration of the							
	l		major and career paths; strategies for academic		1		l		1	
Geosciences	GEOL 192	Exploring Geosciences	success and beyond.		Yes		Yes		_	Lecture(s),Guest speaker(s)
			Scientific, surveying, and mapping methods used in							
Caracianasa	CEOL 276		geologic field studies; proposal, map, and report		V					1 -1-/->
Geosciences	GEOL 376	Geologic Field Methods	preparation.		Yes					Lab(s)
			Develops scientific understanding through							
			introduction to the origin, use and environmental impact of geological resources extracted from the							
Geosciences	GEOL 124	Geology of Natural Resources		Yes	1		Yes		1	
	3232127	223.067 C. Haturur Nesources		1.33						
			Develops scientific understanding through							
			introduction to geological processes, natural hazards,							Lecture(s), Assignments(s)/Graded
Geosciences	GEOL 122		earth resources, and their impacts on society.		Yes					Deliverable(s),Readings/Video/Podcast
					1					
Geosciences	GEOL 454	Geomorphology	Origin of landforms; morphology and processes.		Yes		İ	1		Lecture(s),Lab(s)

		T.		1						
			Develop an understanding of glacier physics (mass							
			balance, ice dynamics, heat flow, and hydrology),							
			glacial erosion and sedimentation, glacial landforms,							
			and the relationship between forcings (orbital,							
			climate, tectonic, biological) and glaciations in Earth's							Lecture(s), Assignments(s)/Graded
Geosciences	GEOL 380A2	Glacial Geology	history.		Yes					Deliverable(s),Readings/Video/Podcast
Geosciences	GEOL SOUNZ	Glacial Geology	Physical and biological history of Earth with		103					Deliverable (3), neading 3) vide 6) i odease
		Historical C Aughstical								
		Historical & Analytical	introduction to laboratory, computer, and field							
Geosciences	GEOL 154	Geology	techniques.		Yes					Lecture(s),Readings/Video/Podcast,Lab(s)
			Interaction of water and geologic materials; surface							Lecture(s),Guest
			and groundwater; quantitative analysis and geologic							speaker(s), Assignments(s)/Graded
Geosciences	GEOL 452	Hydrogeology	effects on quality and flow of groundwater.		Yes		Yes		Yes	Deliverable(s),Readings/Video/Podcast,Lab(s)
			Understanding the physical processes, natural hazards,							
			earth materials, and natural resources of planet Earth,							
			and the relationship of humans to this planet.							
			Outstanding examples of natural features from							
		Introduction to Geology -	national and local parks and monuments, using							
Geosciences	GEOL 110	Parks and Monuments	narrated high-resolution (including aerial) video.	Yes			Yes			
Geosciences	GLOL 110	r arks and Wondments	marrated high-resolution (including dental) video.	163			163			
Conssigneds	GEOL 121	Introductory Coology I - 5	Laboratory applications of introductory g!		Vos					Dondings (Video /Dodenst Lab/s)
Geosciences	GEOL 121	Introductory Geology Lab	Laboratory applications of introductory geology.		Yes					Readings/Video/Podcast,Lab(s)
			Occurrence, origin, and exploration of economic							
Geosciences	GEOL 447	Mineral Deposits	metallic mineral deposits.		Yes				Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
			Earth materials, structures, and surface processes.							
		Physical Geology for Scientists	Geologic analysis using field data, topographic and							Lecture(s), Assignments(s)/Graded
Geosciences	GEOL 150	& Engineers	geologic maps, and aerial photos.		Yes		Yes	Yes		Deliverable(s),Lab(s),Discussion/Recitation
			Structure, flow, and composition of the deep Earth;							Lecture(s), Assignments(s)/Graded
			introduction to geophysics; tests of plate tectonic							Deliverable(s),Readings/Video/Podcast,Module
Geosciences	GEOL 250	The Solid Earth	theory.		Yes					or Unit,Discussion/Recitation
					1					
			Interpretation of 12-lead ECG tracings, administering							
		Floatracardiagrah & Evarsica								
Harlth & Francisc Coinne	UEC 420	Electrocardiogrph & Exercise	exercise tests, and prescribing exercise program for				V			Lastronia (Dasitation
Health & Exercise Science	HES 420	Management	healthy individuals and special populations.				Yes			Lecture(s),Lab(s),Discussion/Recitation
			L							
			Theory and practice of exercise prescription for							
			healthy individuals, cardiac patients, and other special							
			populations according to the American College of							
			Sports Medicine (ACSM) guidelines. Includes the							
			practice of proper lifting and spotting techniques,							
			manipulation of training variables, and design of safe,							
Health & Exercise Science	HES 340	Exercise Prescription	effective, and efficient individual workout programs.			Yes				
		r··	Personal health behaviors and personal choice in							
Health & Exercise Science	HES 145	Health and Wellness	response to wellness.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
The second second	.,20 2 10	Population Health & Disease	Causes of disease throughout the lifespan and		1.25					======================================
Health & Exercise Science	HES 345	Prevention	interventions designed to prevent disease.			Yes	1		1	
Tieditii & Exercise Science	11L3 343	rievention	interventions designed to prevent disease.			163				
										Guest encelled(s) Assign
										Guest speaker(s),Assignments(s)/Graded
			Interaction of humans and nature in American history							Deliverable(s),Readings/Video/Podcast,Module
		American Environmental	with emphasis on relationships between							or Unit,Discussion/Recitation,Service
History	HIST 355	History	environmental, social, and cultural change.		Yes		Yes		Yes	Learning/Community Service
		1	Transformation of major intellectual and cultural]		1	1		1	
			patterns and the process of globalization in modern			1	1		1	Lecture(s), Assignments(s)/Graded
History	HIST 121	Asian Civilizations II	Asia.		Yes	1	Yes		Yes	Deliverable(s), Discussion/Recitation
										Lecture(s), Assignments(s)/Graded
										Deliverable(s),Readings/Video/Podcast,Discussio
History	HIST 452	China Since 1600	Historical developments in China since 1600.		Yes		Yes		Yes	n/Recitation
	132	15							1.00	1.,

	•	_	T		1	1	1	1	1	
										Lecture(s),Guest
										speaker(s), Assignments(s)/Graded
			Cultural resource laws and policy; practices commonly							Deliverable(s),Readings/Video/Podcast,Discussio
		Heritage Resource	employed in the management and preservation of							n/Recitation,Service Learning/Community
History	HIST 478	Management	these diverse resources.		Yes		Yes		Yes	Service
·										Lecture(s),Guest
										speaker(s),Assignments(s)/Graded
			Social, economic, and political development of							Deliverable(s),Readings/Video/Podcast,Module
History	HIST 412	Mexico	Mexican people from pre-Columbian times to present.		Yes	Yes			Yes	or Unit,Discussion/Recitation
History	11131 412	IVIEXICO			163	163			165	<u> </u>
			Public history methods and career paths into							Lecture(s), Guest
			interpretation, museums, archives, historic							speaker(s),Readings/Video/Podcast,Discussion/R
History	HIST 479	Practice of Public History	preservation, oral history, and other fields.		Yes		Yes		Yes	ecitation
			Focus on issues related to Japan's historical							
			developments in "feudalism," Confucianism,							
			constitutionalism, imperialism, liberalism, socialism,							
			fascism, totalitarianism, militarism, democracy,							
			capitalism, and post–modernism. Contemporary							Lecture(s), Assignments(s)/Graded
										Deliverable(s),Readings/Video/Podcast,Discussio
	LUCT AFF	T	issues related to war, peace, and Japan's international		.,				V	
History	HIST 455	Tokugawa and Modern Japan	role are also discussed.		Yes		Yes		Yes	n/Recitation
										Lecture(s), Assignments(s)/Graded
			Major issues and themes in the historical development							Deliverable(s),Readings/Video/Podcast,Discussio
History	HIST 151	U.S. History Since 1876	of the United States since Reconstruction.		Yes		Yes		Yes	n/Recitation
Horticulture & Landscape			Practices used by arborists and landscape managers to							
Architecture	HORT 464A	Arboriculture	plant, appraise and maintain landscape trees.	Yes			Yes			
			Theories, methods, and practices for interpreting,							Lecture(s),Guest
Horticulture & Landscape			describing, and representing natural and human							speaker(s),Assignments(s)/Graded
•	LAND 444	Ecology of Landscapes		V			V			Deliverable(s),Readings/Video/Podcast
Architecture	LAND 444	Ecology of Landscapes	modified landscapes.	Yes			Yes			Deliverable(s),Readings/Video/Podcast
Horticulture & Landscape			Exploration and understanding of natural and cultural							
Architecture	LAND 241	Environmental Analysis	landscapes through analytical simulation techniques.		Yes		Yes			Lecture(s), Assignments(s)/Graded Deliverable(s)
			Plant growth, development and physiology, major							1
Horticulture & Landscape		Environmental Plant Stress	sources of stress in plants, global issues in							1
Architecture	HORT 476	Physiology	environment and plant stress.	Yes					Yes	1
			Historical development of agriculture; environmental							
Horticulture & Landscape		Environmental Issues-	consequences of modern food production and other							
Architecture	HORT 171	Agriculture	cultural approaches to agriculture.	Yes		Yes				
7 Hornicoccure		, ig. rouncure	cultural approaches to agriculture.	1.03		1.03				
Horticulture & Landscape			Commercial production and marketing of bedding							
Architecture	HORT 412	Floriculture Crops			Yes		Yes		V	Lecture(s), Discussion/Recitation
Architecture	HURT 412	Fioriculture Crops	plants, potted container crops, and cut flowers.		res		res		Yes	Lecture(s), Discussion/Recitation
			Identification, landscape features, cultural							
Horticulture & Landscape			requirements, and uses of ornamental annual,							
Architecture	HORT 322	Herbaceous Plants	perennial, and bulb plants.	Yes			Yes			
			Principles of plant science and related disciplines as							1
Horticulture & Landscape			the base and context for the introduction of			1			1	1
Architecture	HORT 100	Horticultural Science	horticultural practices.		Yes	1	Yes		Yes	Lecture(s),Lab(s)
			Identification, landscape features, cultural							
Horticulture & Landscape			requirements, and landscape use of coniferous and							
Architecture	HORT 221	Landscape Plants	deciduous trees and shrubs, vines, and evergreens.	Yes			Yes			
			Nursery industry organization, management,						1	
			equipment, field and container production, storage,							
Horticulture & Landscape	1	N Burdinetine 8	shipping, marketing, and business management			1			1	
		INUISERY Production &		1			1	1	1	İ
1	HORT 321	Nursery Production & Management		Yes			Yes		Yes	
Architecture	HORT 321	Managemnt	practices.	Yes			Yes		Yes	
1	HORT 321		practices. First year course in horticulture and landscape	Yes			Yes		Yes	
Architecture	HORT 321	Managemnt	practices. First year course in horticulture and landscape architecture. Information and skills necessary to	Yes			Yes		Yes	
1	HORT 321		practices. First year course in horticulture and landscape	Yes	Yes		Yes		Yes	

	1	1	1	1	1	1	1	1		<u>, </u>
Horticulture & Landscape			Examination of issues specific to organic food							
Architecture	HORT 424	Topics in Organic Agriculture	production systems and marketing.	Yes			Yes			
Horticulture & Landscape		Urban and Community	Policies and management of publicly and privately							
Architecture	HORT 466	Forestry	owned community forests in urbanized areas.	Yes		Yes				
		,	,							Lecture(s),Guest
										speaker(s),Assignments(s)/Graded
			Designing the urban landscape, including precedent							Deliverable(s),Readings/Video/Podcast,Discussio
Horticulture & Landscape			exploration about overall image, materials, and							n/Recitation,Service Learning/Community
·			_ ·						V	-
Architecture	LAND 446	Urban Design	structure of the city and its components.		Yes		Yes		Yes	Service
			Biology of grapevines and vineyard management							
Horticulture & Landscape		Viticulture Practices -Grape	including planting, training, pest control, pruning, and							
Architecture	HORT 462	Production	harvesting; special emphasis on Colorado.		Yes				Yes	Lecture(s)
			Center administration related to program							Lecture(s), Assignments(s)/Graded
Human Development & Family		Administration of Early Child	development and operations, budgeting, state							Deliverable(s),Readings/Video/Podcast,Module
Studies	HDFS 439	Programs	regulations and licensing, and personnel issues.				Yes			or Unit,Discussion/Recitation
		- regression	Physical, cognitive, and socioemotional development				1			
Human Development & Family		Adolescent/Early Adult	of adolescents and young adults in context of family,							
Studies	HDFS 311	Development in Context	relationships, and culture.				Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
	HDF3 311	Development in context					163		165	Lecture(s),Assignments(s)/Graded Deliverable(s)
Human Development & Family	11055 250		Analyze, interpret, apply, and write about research							
Studies	HDFS 350	Applied Research Methods	findings in human development.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s)
			Theory and research concerning couple and family							
Human Development & Family			processes; social contexts in which couples and							
Studies	HDFS 402	Couple and Family Studies	families change over time.				Yes			Lecture(s), Assignments(s)/Graded Deliverable(s)
			Theories of play and creativity provide the foundation							
			for examining the role of art, music, and literature in							
			early childhood development. Exploration of creative							
			techniques appropriate for young children and how							
			these techniques enhance the child's self-expression,							
Human Davidanmant & Family			•							Lastura(s) Bandings (Video (Badeast Madula or
Human Development & Family	UDEC 247	6	creativity, and development in educational, medical,						V	Lecture(s),Readings/Video/Podcast,Module or
Studies	HDFS 217	Creative Experiences-Children	and therapeutic settings.		Yes		Yes		Yes	Unit,Discussion/Recitation
			Developmental and learning outcomes in young							
			children with disabilities 0-8 years in the early							
			childhood education context. Examine atypical							
			development, inclusive education, strategies and							
			intervention, and family partnerships relevant to early							
			interventionists, educators, and related services, such							
			as occupational therapy, physical therapy, speech-							
Human Development & Family		Disabilities in Early Childhood	language pathology, music therapy, and applied							Lecture(s), Assignments(s)/Graded
	HDFS 317	Education					V			-
Studies	UDE3 317	Education	behavioral analysis.				Yes			Deliverable(s),Readings/Video/Podcast
	1								1	
			Use of interdisciplinary perspective to understand						1	
			individuals who have disabling conditions relevant to						1	
			careers in health, educational, rehabilitation, and						1	
			human service professions. Causes, outcomes, and						1	Lecture(s),Guest
			intervention of commonly occurring disabilities and						1	speaker(s),Assignments(s)/Graded
Human Development & Family			health conditions (e.g., congenital disabilities,						1	Deliverable(s),Readings/Video/Podcast,Module
Studies	HDFS 315	Disability across the Lifespan	diabetes, spinal cord injuries).			Yes			Yes	or Unit,Discussion/Recitation
Staates	1.1013313	Disability deloss the Ellespain	arabetes, sp.riar cora injuries).	1	·	1.03			1.00	or oring a soussion, recitation

1			T	1			1		_
Human Development & Family Studies	HDFS 410	Early Socioemotional Development	Social and emotional development in children ages 3-8: atypical and typical development, developmental theories and models, risk and protective factors, evidence-based programs, and empirically validated teaching strategies for preventing challenging behaviors and fostering adaptive social skills and emotion regulation.			Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Other (please describe): Race, ethnicity, & culture are infused throughout the curriculum
Human Development & Family Studies	HDFS 475	Entrepreneurs and Leaders in Human Services	Skills and knowledge about leadership and entrepreneurship in areas pertinent to human development and family studies, as human services, non-profits, and other enterprises related to helping individuals, couples, and families.			Yes			Lecture(s),Readings/Video/Podcast,Discussion/R ecitation
Human Development & Family Studies	HDFS 334	Family and Parenthood	Practical, theoretical, and empirical information on the dynamics of family and parenthood across the lifespan. Emphasis on understanding how families and parents in diverse ecological and social contexts experience their roles and relationships. Exploration of factors that contribute to risk as well as evidence-based practices to support and enhance family systems and parents.			Yes			Lecture(s),Assignments(s)/Graded Deliverable(s)
Human Development & Family Studies	HDFS 477	HDFS Professional Preparation	Exploration of professionalism, workplace issues, leadership and communication skills, goal setting, self-management, and building a professional identity in person, writing, and online. Completion of steps to secure an internship.			Yes			Lecture(s),Assignments(s)/Graded Deliverable(s)
Human Development & Family Studies	HDFS 101	Individual/Family Development	Principles of life-span human development in the context of the family. Theory and research on the influence of family systems on individuals.			Yes			Lecture(s), Assignments(s) / Graded Deliverable(s), Readings / Video / Podcast
Human Development & Family Studies	HDFS 318	Infancy and Toddlerhood	Physical, cognitive, language, and socio-emotional development from pre-birth through 36 months, with an emphasis on applied settings.			Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Human Development & Family Studies	HDFS 310	Infant and Child Development	Physical, cognitive, and socioemotional development from birth through middle childhood in context of family, relationships, and culture.			Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Human Development & Family Studies	HDFS 286	Practicum-Professional Skills	Career exploration and community placement opportunities to observe individuals/families throughout the lifespan and apply knowledge gained from prior coursework in human development and family studies.			Yes			Lecture(s),Assignments(s)/Graded Deliverable(s)
Human Development & Family Studies	HDFS 498A	Research: Human Development	Conducting research projects focused on social sustainability.		Yes			Yes	Other (please describe): conducting research projects focused on social sustaibility
Human Dimensions of Natural Resources	NRRT 193	New to the Major Seminar	Introduces students new to the Human Dimensions of Natural Resources and Natural Resource Tourism majors to faculty, department, college and university resources, careers, research, outreach, advising resources, and other students.	Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussio n/Recitation
Human Dimensions of Natural Resources	NRRT 270	Principles of Natural Resource Tourism	Tourism and private commercial outdoor recreation industry in America.	Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation

			1				1	
			Foundation in planning, organizing, and producing					Lecture(s),Guest
			tourism special events and conferences. Functions and					speaker(s),Assignments(s)/Graded
Human Dimensions of Natural			strategies necessary for effective tourism event					Deliverable(s),Readings/Video/Podcast,Module
Resources	NRRT 460	Tourism Event Planning	management.	Yes		Yes	Yes	or Unit,Discussion/Recitation
nesources	141111 400	Tourism Evener lanning	management.	163		103	163	Lecture(s),Assignments(s)/Graded
			Research and policy issues related to women in					Deliverable(s),Readings/Video/Podcast,Module
International Education	IE 470	Women and Development	developing countries.	Yes	Yes		Yes	or Unit
			Jan San San San San San San San San San S					
			Introduces Learning Assistants (LAs) to learning theory					
			and conceptual development. Focuses on the					
			acquirement of teaching skills that enhance					
			collaborative and active learning. Skill exploration and					Lecture(s), Assignments(s)/Graded
		Learning Assistants - Higher	practice includes questioning techniques, motivation					Deliverable(s),Readings/Video/Podcast,Module
Intra-University	IU 274	Education	and cooperative learning, and small group facilitation.			Yes	Yes	or Unit
			Ease the transition to college by learning how					
			identities and experiences inform values, skills and					
			interests, and how they apply to educational and					
			professional aspirations. Explore how to be successful					
			academically, and develop meaningful relationships as					Lecture(s),Readings/Video/Podcast,Discussion/R
Intra-University	IU 172	New Student Seminar	a member of CSU's inclusive campus community.			Yes		ecitation
			Natural resources issues and the role of news media,					Lecture(s), Assignments(s)/Graded
		Food & Natural Resources	PR, and advertising and how people form beliefs about					Deliverable(s),Readings/Video/Podcast,Module
Journalism & Media Communication	ITC 419	Communication	food and natural resources in communication.	Yes		Yes	Yes	or Unit,Discussion/Recitation
yearransm & mean communication	310 123	Communication	Tool and natural resources in communication	1.03		1.63	1.03	or ornigorous story recreation
			Concepts and skills related to the process and					Lecture(s), Assignments(s)/Graded
		Science and Environmental	products of science communication in journalism,					Deliverable(s),Readings/Video/Podcast,Module
Journalism & Media Communication	JTC 319	Communication	advocacy, strategic communication, and online media.	Yes		Yes		or Unit
			Development of speaking, reading, and writing					Lecture(s), Assignments(s)/Graded
		Advanced Communication	proficiency through an in-depth examination of					Deliverable(s),Readings/Video/Podcast,Module
Languages, Literatures & Cultures	LSPA 400	Skills-Spanish	representative writings and media communications.	Yes		Yes	Yes	or Unit,Discussion/Recitation
			Superioration of how bishesisal social solitical and					
			Examination of how historical, social, political, and					
			economic forces have shaped Italian society and					
Languages, Literatures & Cultures	LITA 337	Cinema, Culture, and Society	culture in the modern period, including contemporary Italy, through the prism of film. Taught in Italian.			Yes	Yes	Missing
Languages, Literatures & Cultures	LITA 337	Cilienta, Culture, and Society	Essentials of Italian for the beginner: aural			res	163	IVIISSIIIg
Languages, Literatures & Cultures	LITA 100	First-Year Italian I	comprehension, speaking, reading, writing.			Yes		Lecture(s)
Edilgadges, Effertuares & cultures	EHA 100	Thist real italiant	comprehension, speaking, reading, writing.			163		Ecotare(3)
			Essentials of Italian for the continuing student: aural					
Languages, Literatures & Cultures	LITA 101	First-Year Italian II	comprehension, speaking, reading, writing.			Yes	Yes	Lecture(s), Discussion/Recitation
							1	Assignments(s)/Graded
		Introduction to Spanish	Translation and interpreting of written and oral texts				1	Deliverable(s), Discussion/Recitation, Service
Languages, Literatures & Cultures	LSPA 313	Translation & Interpreting	into and from the Spanish language.	Yes		Yes	Yes	Learning/Community Service
								Lecture(s),Assignments(s)/Graded
			Historical context of contemporary issues in the					Deliverable(s),Readings/Video/Podcast,Module
Languages, Literatures & Cultures	LSPA 335	Issues in Hispanic Culture	culture of Spanish-speaking countries.		Yes		Yes	or Unit,Discussion/Recitation
		2	Development of reading and writing proficiency				1	Lecture(s),Assignments(s)/Graded
landa di tanta di Cali	1 CD 4 300	Reading & Writing for	through an in-depth examination of contemporary	V		V	\	Deliverable(s),Readings/Video/Podcast,Discussio
Languages, Literatures & Cultures	LSPA 300	Communication - Spanish	writing.	Yes		Yes	Yes	n/Recitation
			Review and extensive practice of Italian language and					
			culture in the three modes of communication:					
			interpersonal, interpretative and presentational					
			communication and in all four skills (speaking, writing,					
			listening and reading) with a focus on a proficiency					
Languages, Literatures & Cultures	LITA 201	Second-Year Italian II	level target of intermediate-mid.	Yes		Yes	Yes	Lecture(s),Module or Unit
-		•						

		1	ı	ı	1	1	1		1
Languages, Literatures & Cultures	LSPA 200	Second-Year Spanish I	Review and practice of Spanish language and culture in the three modes of communication: interpersonal, interpretative and presentational communication and in all four skills (speaking, writing, listening, and reading) with a focus on a proficiency level target of intermediate-low.	Yes	Yes			Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussio n/Recitation
			Review and extensive practice of Spanish language						
			and culture in the three modes of communication:						
			interpersonal, interpretative and presentational						
			communication and in all four skills (speaking, writing,						Assignments(s)/Graded
			listening and reading) with a focus on a proficiency						Deliverable(s),Readings/Video/Podcast,Discussio
Languages, Literatures & Cultures	LSPA 201	Second-Year Spanish II	level target of intermediate-mid.	Yes		Yes			n/Recitation
									Assissant and Assissant As
Languages, Literatures & Cultures	LSPA 379	Consider Loarning Chanish	Language related voluntary community work	Vos		Vos		Vos	Assignments(s)/Graded Deliverable(s),Service Learning/Community Service
Languages, Literatures & Cultures	L3PA 379	Service Learning-Spanish	Language-related voluntary community work.	Yes		Yes		Yes	Learning/Community Service
									Assignments(s)/Graded Deliverable(s),Service
Languages, Literatures & Cultures	LSPA 479	Service Learning-Spanish	Language-related voluntary community work.	Yes		Yes		Yes	Learning/Community Service
zangadges) ziteratares a cartares	20171 173	Service Learning Spanish	Early and France voluntary community works			1.03			zearmig/ community service
			Content-based language in the social sciences (Human						
			Development Family Studies, Social Work, Early						
			Childhood Education, etc.) with a multicultural focus.						
			Grammar and vocabulary designed to develop						
			competency in areas listed. Oral component includes						
			working on interview techniques for each area to						
			develop cultural and linguistic abilities to work with						Lecture(s), Assignments(s)/Graded
		Spanish for Youth and	youth and families from the Spanish-speaking						Deliverable(s),Readings/Video/Podcast,Discussio
Languages, Literatures & Cultures	LSPA 347	Families	community.			Yes		Yes	n/Recitation
	1004 454	T	Selected topic studies such as themes, topoi, and						Lecture(s),Assignments(s)/Graded
Languages, Literatures & Cultures	LSPA 454	Topic Studies in Spanish	interdisciplinary studies in literature.			Yes			Deliverable(s),Readings/Video/Podcast
			Special topics team-taught course in the arts and/or						Lecture(s),Guest speaker(s),Assignments(s)/Graded
		Seminar in Arts, Humanities,	humanities and/or social sciences that crosses						Deliverable(s),Module or
Liberal Arts	LB 393	Social Sciences	disciplinary boundaries.	Yes		Yes		Yes	Unit, Discussion/Recitation
Elocidi / il co	25 033	Social Sciences	ansorphinary boundaries.	1.63		1.63			omejo isoassiony neoreación
			Introduction to arts and humanities within a global						
			cultural context via interdisciplinary approaches and						
			cultural materials, or texts broadly conceived from the						Lecture(s),Assignments(s)/Graded
			fields of literature, history, music, film, the visual arts,						Deliverable(s),Readings/Video/Podcast,Module
19 1 4 4	10.470	5	popular culture, etc., for a greater appreciation and						or Unit,Discussion/Recitation,Other (please
Liberal Arts	LB 173	Encountering the Global	experience of global cultures.		Yes				describe): Field trip to Gregory Allicar Museum
			Integration and reflection for liberal arts majors with						
	1		an emphasis on core competencies and academic,						Lecture(s),Readings/Video/Podcast,Discussion/R
Liberal Arts	LB 492	Liberal Arts Capstone Seminar	professional and/or career transitions.			Yes		Yes	ecitation
		zzpotone seminur	E STATE OF THE PROPERTY OF THE						Lecture(s),Guest
									speaker(s),Assignments(s)/Graded
			Advanced design and management of logistics and						Deliverable(s),Readings/Video/Podcast,Module
Management	MGT 377	Advanced Logistics	distribution operations within global supply chains.	Yes		Yes		Yes	or Unit,Discussion/Recitation
			Principles of management in combination with						
		Contemporary Management	practices of the new economy to achieve managerial						
Management	MGT 320	Principals and Practices	goals.	Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
			How creativity and innovation can be developed for						Lecture(s), Assignments(s)/Graded
Management	MGT 330	Creativity Innovation Value	application in value creation.			Yes			Deliverable(s),Readings/Video/Podcast
									Lecture(s),Assignments(s)/Graded
		Fundamentals of	Concepts of entrepreneurship and role of					V	Deliverable(s),Module or
Management	MGT 340	Entrepreneurship	entrepreneurs in the economy.	Yes		Yes		Yes	Unit,Discussion/Recitation

									Lecture(s),Assignments(s)/Graded
		Internataional Business	Multinational corporations: their scope, activities,						Deliverable(s),Readings/Video/Podcast,Discussio
Management	MGT 475	Management	managerial problems and decisions.		Yes		Yes	Yes	n/Recitation
			<u> </u>						Lecture(s),Guest
									speaker(s), Assignments(s)/Graded
		Leadership and	Behavior of people and groups as members of						Deliverable(s), Module or
Management	MGT 410	Organizational Behavior	organizations.			Yes			Unit, Discussion/Recitation
			Entrepreneurs and the entrepreneurial process.						
Management	MGT 420	New Venture Creation	Growth of an independent business.		Yes		Yes	Yes	Lecture(s), Discussion/Recitation
			Hailing Annual A						
			Utilize teamwork to solve real business problems for						
			organizations as engaged consulting teams. The team project solves a real and current business challenge,						
			and also helps develop project management,						
			communication, business writing, information						
			technology, public speaking, event planning, time						Module or Unit, Service Learning/Community
Management	MGT 486A	Practicum Consulting	management, group dynamics, and team work skills.		Yes				Service
		Practicum: Supply Chain	Research and recommend solutions to "real world"						
Management	MGT 486B	Management	supply chain management problems.		Yes			Yes	Service Learning/Community Service
			Concept of value-driven supply chains; design and						Lecture(s),Guest
			management of effective supply chains; emphasis on						speaker(s),Assignments(s)/Graded
Management	MGT 301	Supply Chain Management	current practice and recent trends.		Yes			Yes	Deliverable(s), Discussion/Recitation
A de alestica	NAVT 220	Business Customer	Managing relationships with distribution channel				V	V	Lecture(s),Readings/Video/Podcast,Discussion/R
Marketing	MKT 330	Relationships Marketing Strategy &	intermediaries and business customers. Marketing decisions involving integration of elements				Yes	Yes	ecitation
Marketing	MKT 479	Management	of the marketing mix.				Yes	Yes	Lecture(s)
ivial ketilig	IVIK1 475	ivianagement	of the marketing mix.				res	ies	Lecture(s)
			Examination of retailing principles and practices,						
			including merchandise management, retailing						Lecture(s),Guest
			strategy, supply chain management, store						speaker(s),Readings/Video/Podcast,Discussion/R
Marketing	MKT 360	Retailing	management, and sustainable retail operations.		Yes		Yes	Yes	ecitation
			Recruiting, selecting, training, compensating,						
Marketing	MKT 363	Sales Management	motivating, supervising, and evaluating a sales force.				Yes	Yes	Lecture(s)
			Principles and methods for building, analyzing, and						
8 4-4h	MATH 348	Theory of Population &	interpreting mathematical models of ecological and		V				Lecture(s), Assignments(s)/Graded
Mathematics	IVIATH 348	Evolutionary Ecology	evolutionary problems in biology. Comfort, psychrometrics, loads, solar radiation,		Yes				Deliverable(s),Lab(s)
			heating and cooling system design, transport, solar						
Mechanical Engineering	MECH 463	Building Energy Systems	system design, economics.	Yes		Yes			
			Energy generation, conversion, distribution, storage,	1.00		1,44			
			and efficiency, including analysis of power generation						
			systems associated with fossil fuels, biofuels, solar,						
			wind, geothermal, hydropower, tidal, and nuclear						
Mechanical Engineering	MECH 403	Energy Engineering	energy.	Yes		Yes			
			The engineering design process with emphasis on	1				1	
			teamwork, ideation, decision-making, and project	1				1	
l.,			planning as applied to a group design project in	1	I		l	l	
Mechanical Engineering	MECH 202	Engineering Design II	mechanical engineering.	1	Yes		Yes	Yes	Lecture(s)
			Canstone engineering decign project transities						
		Engineering Design Practicum	Capstone engineering design project; transition experience to the mechanical engineering profession						Guest speaker(s), Service Learning/Community
Mechanical Engineering	MECH 486A	I	in industry and graduate education.		Yes		Yes	Yes	Service
media.near Engineering	.*IECI1 400A	I.	mindada, and graduate education.				1.00		Joen Noc

		T	T T		1		1		
			Country of the control of the contro						
			Capstone engineering design project; transition						
		Engineering Design Practicum							Guest speaker(s), Service Learning/Community
Mechanical Engineering	MECH 486B	II	in industry and graduate education.	Yes		Yes		Yes	Service
			Procedures for selecting the optimal material(s) for						Lecture(s), Assignments(s)/Graded
			mechanical engineering design under multiple						Deliverable(s),Other (please describe): Use of
			constraints, including reliability, safety, functionality,						software for materials selection that has
Mechanical Engineering	MECH 434	Materials Selection	cost, and environmental impact.	Yes				Yes	sustainability as one of the criterion
			Thermodynamic properties of fluids, control volume						
			and differential analysis, conservation of mass,						
			momentum, and energy, measurements, dimensional						
			analysis, boundary layer theory, Navier-Stokes						
			equations and exact solutions; internal and external						
			flows, lift and drag, mechanical engineering						
		Mechanics & Thermodynamic	applications such as pumps, compressors, turbines,						
Mechanical Engineering	MECH 342	- Flow Process	and airfoils.	Yes					
			First and second laws of thermodynamics, properties						
			of pure substances, analysis of open and closed						
			thermodynamic systems, applications of						
			thermodynamic principles to power and refrigeration						Assignments(s)/Graded
Mechanical Engineering	MECH 337	Thermodynamics	cycles.	Yes		Yes			Deliverable(s), Discussion/Recitation
Wechanical Engineering	IVIECH 337	mermodynamics	cycles.	162		res			Deliverable(s), Discussion/Recitation
Microbiology, Immunology &		Capstone: Microbiome	Discussion of literature on a topic of importance to the						Lecture(s),Assignments(s)/Graded
Pathology	MIP 400L	Biology	research community in the discipline.	Yes		Yes		Yes	Deliverable(s), Discussion/Recitation
			Structure, function, development, physiology, and						
Microbiology, Immunology &			molecular biology of microorganisms emphasizing						
Pathology	MIP 300	General Microbiology	bacteria.	Yes		Yes			Lecture(s), Guest speaker(s), Discussion/Recitation
Microbiology, Immunology &			Laboratory skills and techniques for isolating,						Lecture(s), Module or
Pathology	MIP 302	General Microbiology Lab	characterizing, and identifying bacteria.	Yes		Yes			Unit,Lab(s),Discussion/Recitation
			Second in four-part acting sequence. Application of						
			the given circumstances to a text and development of						Assignments(s)/Graded
			characterization, foundational course in scene work,						Deliverable(s), Readings/Video/Podcast, Discussio
Music, Theatre & Dance	TH 251	Acting II	and "inside- out" approaches to acting vocabulary.			Vos			n/Recitation
Iviusic, meatre & Dance	III 231	Acting ii				Yes			
			Contrapuntal techniques from the Middle Ages						Lecture(s),Assignments(s)/Graded
			through the 20th century; development of						Deliverable(s),Readings/Video/Podcast,Discussio
Music, Theatre & Dance	MU 417	Counterpoint	compositional skills in counterpoint.			Yes			n/Recitation
			Global aspects of music and its meaning with						
			connections to the environment, sound, and world						
Music, Theatre & Dance	MU 132	Exploring World Music	cultures.	Yes	Yes				
			Theatre as an art form and one of the humanities, its						
			impact on society, and its relationship to other art	1					Lecture(s), Assignments(s)/Graded
Music, Theatre & Dance	TH 141	Introduction to Theatre	forms.			Yes			Deliverable(s),Readings/Video/Podcast
,									
			Four-part diatonic writing; diatonic sequences and						
Music, Theatre & Dance	MU 118	Music Theory II	related linear techniques; diatonic modulation.			Yes			Readings/Video/Podcast, Discussion/Recitation
iviusit, fileatie & Dalite	INIO 110	iviusic friedry if	related inlear techniques, didtoriit modulation.			165			neadings/ video/ Foucast, Discussion/ Recitation
		1	but the second of the second o	I	1				
			Relation of music to the needs of developmental and	1			1		
		1	aging populations. Techniques for formulating	I	1				
			objectives, designing and implementing programs, and	1			1		
Music, Theatre & Dance	MU 440	Music Therapy Methods I	evaluation.		Yes			1	
			Music therapy techniques: assessment, formulating						
			objectives, designing and implementing programs,						Lecture(s),Assignments(s)/Graded
			evaluation, problem solving, and creativity. Focus is on						Deliverable(s),Readings/Video/Podcast,Discussio
Music, Theatre & Dance	MU 444	Music Therapy Methods III	medical settings.			Yes			n/Recitation
						1.00			

			<u> </u>		1	1		Lecture(s),Assignments(s)/Graded
			Development of fundamental interactive and					Deliverable(s),Readings/Video/Podcast,Service
Music, Theatre & Dance	MU 250	Music Therapy Practice	professional skills used in music therapy practice.			Yes	Vas	Learning/Community Service
Music, Theatre & Dance	IVIU 250	Music Therapy Practice				res	Yes	
			Major performance production assignment in acting,					Discussion/Recitation,Other (please describe):
			assistant/directing, or dramaturgy in department					Might be the content in the play; varies by
Music, Theatre & Dance	TH 400	Production Workshop	season.			Yes		production.
			Psychological aspects of music: perception,					
			psychoacoustics, aesthetics, musical function,					
			communication, measurement, and affective					
Music, Theatre & Dance	MU 342	Psychology of Music	responses.		Yes			
			Techniques of observing, measuring, and recording					
		Research Methods Music	behavior. Basic experimental methods and procedures					Lecture(s),Readings/Video/Podcast,Discussion/R
Music, Theatre & Dance	MU 343	Therapy	used in music therapy research.			Yes		ecitation
Widdle, Medite & Bullet	100 545	Пстару	Development of song as an art form from monody to			163		Condition
								Lastura(s) Assignments(s)/Craded
14 · · · · · · · · · · · · · · · · · · ·		5	German Lieder, French school, and contemporary			v		Lecture(s), Assignments(s)/Graded
Music, Theatre & Dance	MU 466	Song Literature	songs of England and America.			Yes		Deliverable(s), Discussion/Recitation
			Performance of wind ensemble and band literature					Assignments(s)/Graded
			emphasizing most challenging of repertoire, using a					Deliverable(s),Lab(s),Discussion/Recitation,Servic
Music, Theatre & Dance	MU 404	Symphonic Wind Ensemble	select ensemble of performers.			Yes		e Learning/Community Service
		, ·	·					,
			Performance of selected operas, musicals, oratorio,					Lecture(s), Assignments(s)/Graded
Music, Theatre & Dance	MU 402	Theater/Chamber Orchestra	orchestral accompaniments, and chamber music.			Yes		Deliverable(s),Lab(s)
Music, meatre & Dance	1010 402	meater/chamber Orchestra				162		Deliverable(s),Lab(s)
			Rehearsal and performance of standard orchestral					
Music, Theatre & Dance	MU 302	University Orchestra	literature.			Yes		Assignments(s)/Graded Deliverable(s),Lab(s)
			Guidance for students in exploring who they are					
			individually, how they might fit into a career or a					
			graduate program in the sciences, how to develop					
			their career path to be competitive in the selection					
			process, and preparation of their marketing materials					
			to be used in the future. Helps students gain a better					
			understanding of their individual abilities, strengths,					Lecture(s), Assignments(s)/Graded
			and interests imperative to being successful in a					Deliverable(s),Readings/Video/Podcast,Discussio
Natural Calaria	NCCI 102	CNS Common Sometimen				V	V	The state of the s
Natural Sciences	NSCI 193	CNS Career Seminar	career search.			Yes	Yes	n/Recitation
			Explore the role diverse disciplines, identities, and					
			experiences play in computing and technology, how					
			computing makes an impact in the world, and how it					
			can enhance any CNS major. Outside of the classroom,					
			students participate in outreach through student					
			organizations and mentoring groups, and interact with					
Natural Sciences	NSCI 181A3	Diversity Through Technology	professors and researchers from diverse backgrounds.			Yes		
raculal sciences	142CI 101W2	Diversity initionagn reciniology	professors and researchers from diverse backgrounds.			163		Lecture(s),Assignments(s)/Graded
			Broblems and theories concerning values and					
Dhilasaah	DI III 205	latar direction to Ethion	Problems and theories concerning values and	,,		\	V	Deliverable(s),Readings/Video/Podcast,Discussio
Philosophy	PHIL 205	Introduction to Ethics	standards, right action, and the good life.	 Yes		Yes	 Yes	n/Recitation
			Concepts of force, torque, energy, momentum, work					
			used to cover fluids, waves, sound, temperature, heat;					Lecture(s),Readings/Video/Podcast,Service
Physics	PH 121	General Physics I	biological, physical examples (noncalculus).	Yes		Yes	Yes	Learning/Community Service
			Electricity including electrostatics and simple circuits;					
			magnetism; optics; nuclear physics, radiation;					Lecture(s),Readings/Video/Podcast,Service
Physics	PH 122	General Physics II	biological, physical examples (noncalculus).	Yes		Yes	Yes	Learning/Community Service
•	· · ·	• • •	/ / / / / / / / / / / / / / / / / /	•	•		•	

			1							
			Maxwell-Boltzmann, Fermi-Dirac, and Bose-Einstein							
			distribution functions; kinetic theory; applications to							
Physics	PH 462	Statistical Physics	solids, metals, semiconductors, and gases.		Yes					Lecture(s)
ritysics	111402	Statistical Filysics	solius, metais, semiconductors, and gases.		163		+	 		Lecture(3)
			Advanced seminar that integrates different theories							Assignments(s)/Graded
			and approaches to the study of domestic and/or							Deliverable(s),Readings/Video/Podcast,Discussio
Political Science	POLS 492	Capstone Seminar	international politics and policy.		Yes		Yes		Yes	n/Recitation
		Contemporary Political	Major political theories and ideologies of							Lecture(s),Readings/Video/Podcast,Discussion/R
Political Science	POLS 421	Theories	contemporary times.		Yes		Yes		Yes	ecitation
			Competing approaches to the theory and practice of							Lecture(s), Assignments(s)/Graded
Political Science	POLS 422	Democratic Theory	democracy, both locally and globally.		Yes		Yes	<u> </u>	Yes	Deliverable(s), Discussion/Recitation
			Examines environmental politics in developing							Lecture(s), Assignments(s)/Graded
		Environmental Politics in	countries and evaluates climate change, natural							Deliverable(s),Readings/Video/Podcast,Discussio
Political Science	POLS 442	Developing World	resource governance and environmental justice.		Yes		Yes		Yes	n/Recitation
			Analysis of H.C. Mayisan relations and do							
		Dolitics & Cosista Alexan	Analysis of U.SMexican relations and domestic			1	1			Lastura(s) Assignments(s) (C d
Delinies Coisses	0016 224	Politics & Society Along	politics as these affect regional characteristics and		\	1				Lecture(s),Assignments(s)/Graded
Political Science	POLS 331	Mexican Border	development of U.SMexican border region.		Yes	-				Deliverable(s),Readings/Video/Podcast Lecture(s),Assignments(s)/Graded
			Foundational, institutional, and behavioral features of							Deliverable(s), Assignments(s)/Graded Deliverable(s), Service Learning/Community
Political Science	POLS 302	Political Parties & Elections	American political parties and elections.		Yes		Yes		Yes	Service
Political Science	FOL3 302	Folitical Falties & Elections	American political parties and elections.		Tes		Tes		res	Lecture(s),Assignments(s)/Graded
			Explanations of U.S. policy formation, implementation							Deliverable(s),Readings/Video/Podcast,Discussio
Political Science	POLS 460	Public Policy Process	and impact.		Yes		Yes		Yes	n/Recitation
1 ontical science	1 023 400	T done I oney I rocess	and impact.		163		163		163	Lecture(s),Assignments(s)/Graded
		State & Local Government &	Principles, organization, and operation of American							Deliverable(s),Readings/Video/Podcast,Module
Political Science	POLS 103	Politics	state and local government.		Yes		Yes		Yes	or Unit,Discussion/Recitation
										,,
			Psychologically-based interpersonal communication							
			skills; rapport building, gathering information and							
Psychology	PSY 310	Basic Counseling Skills	bringing about change in others.			Yes				Lecture(s), Guest speaker(s)
			Special, controversial, and emerging topics in							
			psychology, considered in the context of foundational							Assignments(s)/Graded
Psychology	PSY 493	Capstone Seminar	knowledge and principles from the field.				Yes			Deliverable(s), Discussion/Recitation
			Social psychological theory and research on effects of							Lecture(s),Guest
			behavior on the environment; environmental							speaker(s),Assignments(s)/Graded
Psychology	PSY 316	Environmental Psychology	influences on behavior.	Yes		-	Yes		Yes	Deliverable(s),Readings/Video/Podcast
Develople and	DCV 400	Sield Diesessent	Supervised affiliation with and/or service work in			V				
Psychology	PSY 488	Field Placement	approved psychological setting.			Yes				
			Entry level training in the treatment of substance use							
			disorders with a focus on introductory motivational							
		Foundational Addiction	interviewing and group therapy for individuals with							
Psychology	PSY 366	Counseling Skills	substance use disorders.			Yes				
, 5	. 31 300	55 Shipening Grants	22222232			1.00				
			Current topics and issues related to professional roles,							
		Colloquium-Family and	responsibilities, and opportunities in Family and							
School of Education	FACS 479	Consumer Sciences	Consumer Sciences locally, nationally, and globally.			Yes				
			Exploration of the importance of relationships as the				1			
			focus of education by learning the principles and			1				Lecture(s), Assignments(s)/Graded
l			practices of restorative justice, and culturally			1				Deliverable(s),Readings/Video/Podcast,Module
		Culture of Care in Schools	appropriate teacher practices.	1	Yes	Yes	1		Yes	or Unit, Discussion/Recitation

School of Education	FACS 380A1	Family & Consumer Science Research	Exploration of family and consumer sciences scholarship and research, current trendsnationally and internationally; journals and reports; planning, implementing, and disseminating scholarship and research projects.	Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussio n/Recitation,Service Learning/Community Service
School of Education	EDUC 350	Instruction I-Individual- Management	Theory, research and practice of teaching at the junior high/middle school level; adapting instruction for individuals including learners with special needs.			Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
School of Education	EDUC 463	Methods-Teaching Language Arts	Objectives, content, and methods of teaching English, speech, and journalism in secondary schools.	Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussio n/Recitation,Service Learning/Community Service
School of Occupational Therapy	OT 355	The Disability Experience in Society	Description and exploration of disabling conditions; review of support systems including legal and financial implications.		Yes		Yes		
School of Social Work	SOWK 488	Field Placement	Integrate and apply social work competencies (Council on Social Work Education accreditation standards) learned across coursework through direct practice in an agency setting for field education. Demonstrate competency in professional knowledge, values, skills, and affective and cognitive processes for beginning social work practitioners.	Yes	Yes			Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussio n/Recitation,Service Learning/Community Service,Other (please describe): Internship learning
School of Social Work	SOWK 371C	Social Work: Adult Offenders	History, approaches, theories, and social work practices in the adult justice system with a focus on inequity and social justice.	Yes	Yes			Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Lab(s),Discussion/Recitation,Service Learning/Community Service
School of Social Work	SOWK 371B	Social Work: Juvenile Offenders	History, approaches, theories, and social work practices in the juvenile justice system with a focus on inequity and social justice.	Yes	Yes			Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Lab(s),Discussion/Recitation,Service Learning/Community Service
Sociology	SOC 403	Capstone Seminar	Student demonstration of central concepts and procedures currently employed in sociology discipline.	Yes	Yes				Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussio n/Recitation,Service Learning/Community Service
Sociology	SOC 431	Community Dynamics & Development	Nature of community; its institutions, problems and processes, including growth, disintegration, and development.	Yes	Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Lab(s),Discussion/Recitation,Service Learning/Community Service
Sociology	SOC 302	Contemporary Sociological Theory	Explores contemporary social theorists and theoretical schools with a focus on including historically marginalized voices, such as women and people of color. Addresses new theoretical questions, debates, and solutions to confront today's complex social problems.		Yes			Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Sociology	SOC 351	Corporate and State Crime	A comprehensive exploration of the nature, causes, and control of corporate, state, and state-corporate crime. Examples of environmental crime, financial crime, corruption, and war crime.	Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussio n/Recitation

				1						Lecture(s), Assignments(s)/Graded
			Analysis of social organization of gender in							Deliverable(s),Readings/Video/Podcast,Discussio
			, ,							
			contemporary society, emphasizing gendered							n/Recitation,Service Learning/Community
Sociology	SOC 333	Gender and Society	experiences and institutional linkages.				Yes		Yes	Service
										1
			Examines how race, gender, and social class influence							Lecture(s),Guest
			determinants of health and access to care. Discusses							speaker(s),Assignments(s)/Graded
			the rising cost of health care, the power of the							Deliverable(s),Readings/Video/Podcast,Discussio
			pharmaceutical industry, the medicalization of illness,							n/Recitation, Service Learning/Community
Sociology	SOC 344	Health, Medicine, and Society	and new emerging biomedical technologies.		Yes		Yes			Service
			Introduces a way of viewing interactions,							
			relationships, and social phenomena that mold							
			everyday experiences. Examines how social structures							Lecture(s), Assignments(s)/Graded
			shape interactions, and how society constructs social							Deliverable(s),Readings/Video/Podcast,Module
Sociology	SOC 100	Introduction to Sociology	categories and meanings.			Yes			Yes	or Unit, Discussion/Recitation
Sociology	300 100	Introduction to Sociology				163			163	of Offic, discussion, Recitation
			Covers methods sociologists use to conduct							
			empirically grounded and theoretically engaged							
			research. Examines research design, the role of							
		Methods of Sociological	theory, ethics, and multiple methods for gathering							
Sociology	SOC 311	Inquiry	data.				Yes		Yes	Lecture(s), Discussion/Recitation
			Introduction to major theories and research in the							
			sociology of race and racism. Examines historical and							Lecture(s), Assignments(s)/Graded
			contemporary racial inequalities, with a focus on							Deliverable(s),Readings/Video/Podcast,Module
Sociology	SOC 205	Race-Ethnic Relations	systemic and structural racism.		Yes	Yes			Yes	or Unit,Discussion/Recitation
Seciology	300 203	Nace Ethnic Relations	systemic and structural radism.		103	103			103	or onit, biscussion, recitation
			e t t							
			Examination of how society shapes science and							
			technology and how science and technologies interact							
			with and change our social world. Introduces sociology	'						
			sub-fields of Science and Technology Studies and							
			Sociology of Science and uses science and technology							
			as microcosms for analyzing social change and power							
			relationships. Explores contemporary topics such as							
			genetically modified crops, labor-replacing							
			mechanization, smartphones, social media, and							Lecture(s),Readings/Video/Podcast,Module or
Sociology	SOC 380A2	Science, Technology, Society	debates over vaccines and climate change.		Yes		Yes			Unit, Discussion/Recitation
Sociology	30C 380A2	Science, reciniology, society	debates over vaccines and climate change.		165		163			Offit, Discussion, Recitation
			Covers quantitative data acquisition, cleaning,							
			management and analysis. Introduces an analytical							
			software package to clean, merge, and manage data.							
		Applications of Quantitative	Provides tools to perform quantitative analyses and							
Sociology	SOC 314	Research	present results using tables and figures.				Yes		Yes	Lecture(s),Lab(s),Discussion/Recitation
			Sources of stability and stress in changing societies,							Lecture(s), Assignments(s)/Graded
			consequences of planned and unplanned change;							Deliverable(s),Readings/Video/Podcast,Service
Sociology	SOC 362	Social Change	future trends.	Yes			Yes		Yes	Learning/Community Service
	300 302	Table Change		1.00			1.00		1.00	
			Explores patterns in, and theories of, social inequality		1		1	1		
C!-	500.330	Carial Incompli			1	V	1	1		
Sociology	SOC 330	Social Inequality	in the United States and internationally.		+	Yes		+	+	
			Examines social problems related to differences in							
										Lecture(s), Assignments(s)/Graded
			power and privilege. Investigates how social problems							
			power and privilege. Investigates how social problems emerge and the people and communities they harm.							Deliverable(s),Readings/Video/Podcast,Discussio
			emerge and the people and communities they harm.							
Sociology	SOC 105	Social Problems	emerge and the people and communities they harm. Considers how people contest social problems and	Yes				Yes		n/Recitation,Service Learning/Community
Sociology	SOC 105	Social Problems	emerge and the people and communities they harm. Considers how people contest social problems and develop and implement solutions.	Yes				Yes		
Sociology	SOC 105	Social Problems	emerge and the people and communities they harm. Considers how people contest social problems and develop and implement solutions. Determinants and consequences of behavior and	Yes				Yes		n/Recitation,Service Learning/Community Service
Sociology	SOC 105	Social Problems	emerge and the people and communities they harm. Considers how people contest social problems and develop and implement solutions. Determinants and consequences of behavior and response to environmental extremes including floods,	Yes				Yes		n/Recitation,Service Learning/Community Service Lecture(s),Assignments(s)/Graded
			emerge and the people and communities they harm. Considers how people contest social problems and develop and implement solutions. Determinants and consequences of behavior and response to environmental extremes including floods, earthquakes, wind, severe storms, and technological	Yes				Yes		n/Recitation,Service Learning/Community Service Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module
Sociology	SOC 105	Social Problems Sociology of Disaster	emerge and the people and communities they harm. Considers how people contest social problems and develop and implement solutions. Determinants and consequences of behavior and response to environmental extremes including floods, earthquakes, wind, severe storms, and technological emergencies.	Yes	Yes	Yes		Yes		n/Recitation,Service Learning/Community Service Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
			emerge and the people and communities they harm. Considers how people contest social problems and develop and implement solutions. Determinants and consequences of behavior and response to environmental extremes including floods, earthquakes, wind, severe storms, and technological	Yes	Yes	Yes	Yes	Yes	Yes	n/Recitation,Service Learning/Community Service Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module

			1	T	1	1	1		1	
			Examines sociological research, policy, and							Lecture(s),Guest
			programming that addresses women's and girls'							speaker(s),Assignments(s)/Graded
		W C-i 8	r							
C. data	505 257	Women, Crime, &	experiences with crime, victimization, and the criminal						V	Deliverable(s),Readings/Video/Podcast,Module
Sociology	SOC 357	Victimization	processing system more broadly.			Yes			Yes	or Unit,Discussion/Recitation
		Composting	Fundamentals of compost production, use, and							
Soil & Crop Sciences	SOCR 343	Principles/Practice	regulation.	Yes		Yes				
			Broad focus on soil and crop management in							
			agricultural systems, with an emphasis on the driving							
			biophysical factors, processes and interactions.							
			Emphasis on integrating concepts and knowledge from							Lecture(s),Guest
		Crop and Soil Management	previous courses and applying this knowledge toward							speaker(s),Assignments(s)/Graded
Soil & Crop Sciences	SOCR 421	Systems II	an interdisciplinary analysis of agroecosystems.	Yes			Yes		Yes	Deliverable(s),Readings/Video/Podcast,Lab(s)
		,	Soil and water relationships in forest and rangeland							Lecture(s), Assignments(s)/Graded
			ecosystems; significant properties in their							Deliverable(s),Readings/Video/Podcast,Module
Soil & Crop Sciences	SOCR 442	Forest and Range Soils	management.	Yes						or Unit,Discussion/Recitation
Son a crop sciences	50011 112	Torest and Hange sons	management	1.00						Lecture(s), Guest
l			Production and adaptation of cultivated crops;							speaker(s),Assignments(s)/Graded
1		1	principles affecting growth, development,			1		1		Deliverable(s),Readings/Video/Podcast,Module
Soil & Crop Sciences	SOCR 100	General Crops	management, and utilization.		Yes	1		1		or Unit,Lab(s),Discussion/Recitation
Soil & Crop Sciences	SOCK 100	General Crops	management, and utilization.		res				_	or Unit,Lab(s),Discussion/Recitation
			Management of irrigation systems for field crops with							
			emphasis on irrigation methods, irrigation scheduling							Lecture(s), Assignments(s)/Graded
Soil & Crop Sciences	SOCR 371	Irrigation of Field Crops	and strategies for water conservation.		Yes		Yes			Deliverable(s), Discussion/Recitation
			Determination of irrigation water requirements based							Lecture(s),Guest
		Irrigation Principles &	on the estimation of storage and movement of water							speaker(s), Assignments(s)/Graded
Soil & Crop Sciences	SOCR 370	Management	in the soil-plant-atmospheric system.		Yes		Yes			Deliverable(s), Module or Unit
										Lecture(s),Guest
										speaker(s),Assignments(s)/Graded
			Process of soil formation, characterization,							Deliverable(s),Readings/Video/Podcast,Module
Soil & Crop Sciences	SOCR 440	Pedology	classification of soils; soil survey methods.	Yes						or Unit,Lab(s),Discussion/Recitation
Son & Grop Sciences	SOUR TIO	i casiogy	Principles of seed anatomy including reproduction,	1.03						or ornigeas(o))s is cassion, reduction
		Seed Anatomy &	identification, and seed characteristics of plant							
Soil & Crop Sciences	SOCR 200	Identification	families.		Yes					Readings/Video/Podcast,Discussion/Recitation
30ii & Crop Sciences	30CK 200	identification	iaiiiiles:		163					Readings/ Video/ Fodcast, Discussion/ Recitation
			D. 1							
			Basic processes controlling seed development,							
		Seed Development &	maturation, dormancy, storage, germination, and how							
Soil & Crop Sciences	SOCR 201	Metabolism	these factors relate to seedling growth.	Not Covered	Not Covered		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
			Importance of seed production and genetics to seed							
		1	quality. The value of seed quality to field crop					1		Lecture(s), Assignments(s)/Graded
Soil & Crop Sciences	SOCR 311	Seed Quality	production.		Yes		Yes		Yes	Deliverable(s), Module or Unit
			An integrative, hands-on experience in the theory and							Lecture(s),Guest
			application of ecology principles to the soil							speaker(s), Assignments(s)/Graded
Soil & Crop Sciences	SOCR 441	Soil Ecology	environment.		Yes					Deliverable(s),Readings/Video/Podcast
			Foundations on the science of global change and its							
Soil & Crop Sciences	SOCR 400	Soils and Global Change	impact on soil processes and biota.		Yes					Lecture(s), Discussion/Recitation
·			Examination of issues specific to organic food							
Soil & Crop Sciences	SOCR 424	Topics in Organic Agriculture	production systems and marketing.	Yes		Yes				
oc. a crop sciences	30011 724	Topics in Organic Agriculture	production systems and marketing.							Assignments(s)/Graded
		1				1		1		Deliverable(s),Readings/Video/Podcast,Discussio
Soil & Crop Sciences	SOCR 498	Undergraduate Pessareh	Research in soil and crop sciences.	Voc						n/Recitation
Son & Crop Sciences	3UCK 498	Undergraduate Research	·	Yes		-	_		+	ny neotation
er	CT:- :		Research skills and techniques; includes both oral and		v					
Statistics	STAT 498	Research in Statistics	written communication of results.		Yes					Other (please describe): Research Project
		1	Estimation and inference based upon Gaussian linear			1		1		1
			regression models; residual analysis; variable							Assignments(s)/Graded
Statistics	STAT 341	Statistical Data Analysis I	selection; non-linear regression.	1	Yes	1	Yes			Deliverable(s), Discussion/Recitation

			Introduction to biomedical sciences major and faculty;				
		Introduction Biomedical	academic and career planning; information sources in				
Vetrinary & Biomedical Sciences	VMBS 100	Sciences Major	biomedical sciences.		Yes		

Graduate Sustainability-	rocuseu C	ourses					1			
Department	Course #	Course Name	Course Description	Environmental Focused	Environmental Inclusive	Social Focused	Social Inclusive	Economic Focused	Economic Inclusive	How Sustainability is Integrated
										Lecture(s),Guest speaker(s),Assignments(s)/Graded
			Principles of ecosystem sustainability and threats							Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Ecosystem Science &		Principles of Ecosystems	to sustainability. Students will investigate and							on, Service Learning/Community Service, Other (please
Sustainability	ESS 501	Sustainability	develop case studies.	Yes		Yes			Yes	describe): Projects with community partners
			Preparation for international climate negotiations							
			including the Framework Convention on Climate							
			Change (UNFCCC), Conference of the Parties (COP)							
			in locations around the world. Explore							
			environmental sustainability issues on							
			international teams with peers from other							
			institutions. Teams examine environmental							
Faculation Caloneo 9		International Climate	issues/policies through a research project, and							
Ecosystem Science & Sustainability	ESS 505	Negotiations	have the opportunity to prepare for actual climate action negotiations.	Yes		Yes		Yes		
Sustamability	L33 303	Negotiations	action negotiations.	163		163		163		
Ecosystem Science &		Foundations for	Foundations for understanding greenhouse gas							
Sustainability	ESS 524	Carbon/GHG Management	emissions management and accounting.	Yes		Yes		Yes		
Ecosystem Science &	566 543	6	Rules, regulations and standards for greenhouse							
Sustainability	ESS 542	Greenhouse Gas Policies	gas management and accounting.	Yes		Yes		Yes		
			Climate change science, climate change impacts,							
Ecosystem Science &			and climate change mitigation, including							
Sustainability	ESS 543	Global Climate Change	discussions of current topics in climate change.	Yes		Yes				
			Overview of methods for estimating greenhouse							
Ecosystem Science &		Applications in Greenhouse	gas emissions and mitigation potential for							
Sustainability	ESS 545	Gas Inventories	agriculture and forestry activities.	Yes		Yes		Yes		
			Exploring the use and making of agent-based models featuring interacting individuals in							
Ecosystem Science &		Ecological and Social Agent-	ecological and social simulation, with examples							
Sustainability	ESS 554	based Modeling	and projects.	Yes		Yes		Yes		
			The quantitative and qualitative measure of cradle-	-						
Ecosystem Science &			to-grave impacts of products and services on the	L						
Sustainability	ESS 555	Life Cycle Assessment	environment, the economy, and society.	Yes						Lecture(s), Guest speaker(s), Readings/Video/Podcast, Lab(s)
			Analysis of the different major							Lecture(s), Guest speaker(s), Assignments(s)/Graded
			dimensions/definitions of sustainability in current							Deliverable(s), Readings/Video/Podcast, Module or
School of Global Environmental		Issues Global Environmental	issues involving environmental, social and							Unit, Discussion/Recitation, Service Learning/Community
Sustainability	GES 520	Sustainability	economic systems.	Yes			Yes		Yes	Service
				1		1				
			A broad overview of Food/Energy/Water (FEW)	1		1				
			nexus issues, including the science underpinning FEW and the trade-offs, socio-economic							
			constraints, and policy limitations inherent in FEW							
School of Global Environmental		Assessing the Food, Energy,	challenges. Introduction to tools that enhance							
Sustainability	GES 528	Water Nexus	systems-level thinking and problem solving.	Yes		Yes		Yes		
										Lecture(s),Guest speaker(s),Assignments(s)/Graded
Accounting	ACT F41	Forensis and Fraud Auditin	Professional practices for addressing the related	Ves		Vos		Voc		Deliverable(s),Readings/Video/Podcast,Module or
Accounting	ACT 541	rorensic and Fraud Auditing	areas of forensic accounting and fraud.	Yes		Yes		Yes		Unit,Discussion/Recitation
		Accounting for Sustainable	A survey of financial, managerial, and							
Accounting	ACT 605	Enterprises	sustainability accounting systems and reports.	I	Yes	Yes		Yes		

			How policies are crafted to effectively address						
Agricultural & Resource			social issues, especially for agriculture and the						
Economics	AREC 507	Analysis	environment, and how they impact society.		Yes	Yes		Yes	
Agricultural & Resource		Environmental & Natural	Theory, methods, and policy in environmental and						Lecture(s), Guest speaker(s), Assignments(s)/Graded
Economics	AREC 540	Resources Economics	natural resource economics.	Yes			Yes	Yes	Deliverable(s),Readings/Video/Podcast
			Theory, application of concepts relating to social						
			benefit cost analysis of public projects, policies						Lecture(s), Assignments(s)/Graded
Agricultural & Resource			intended to promote social welfare, and economic						Deliverable(s),Readings/Video/Podcast,Module or
Economics	AREC 572	Social Benefit Cost Analysis	growth.	Yes		Yes		Yes	Unit,Discussion/Recitation
			Advanced theory, methods, and literature in						
Agricultural & Resource			natural resource economics, including dynamic						Lecture(s), Guest speaker(s), Assignments(s)/Graded
Economics	AREC 740	Economics	programming and optimal control.	Yes			Yes	Yes	Deliverable(s)
			Concepts of integrated pest management and the						Assignments(s)/Graded
		Advanced Integrated Pest	strategies and tactics employed in the practical						Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Agricultural Biology	BSPM 551	Management	application of these concepts.	Yes		Yes		Yes	on
			L						
			The quantitative and qualitative measure of cradle-						
		Life Cycle Assessment for	to-grave impacts of products and services on the						
Animal Sciences	ANEQ 555	Sustainability	environment, the economy, and society.	Yes			Yes	Yes	
			Paradigms and concepts in ecological						Lecture(s),Guest speaker(s),Assignments(s)/Graded
		Human-Environment	anthropology with an emphasis on adaptation and						Deliverable(s),Readings/Video/Podcast,Module or
Anthropology & Geography	ANTH 530	Interactions	resilience.		Yes	Yes			Unit,Discussion/Recitation
			Global health concerns and problems including						
		Anthropology and Global	poverty, urbanization, malnutrition, diet, war and						
Anthropology & Geography	ANTH 571	Health	refugees, climate, and environment.	Yes		Yes			
			Critical evaluation of the nexus between space,						
			society and environment. An interdisciplinary						
			approach to studying the ways biological, material,						
			historical, political-economic and cultural						
	A NITH CA 7	Blood Control Advanced	processes combine to shape human-environment	V		V			
Anthropology & Geography	ANTH 617	Place, Space and Adaptation	relationships in place-based contexts.	Yes		Yes			
			Exploring the use and making of agent-based models featuring interacting individuals in						
		Ecological and Social Agent-	ecological and social simulation, with examples						
Anthropology & Geography	ANTH 554	based Modeling	and projects.	Yes		Yes			
Antinopology & Geography	ANTIT 334	based Widdeling	and projects.	ies		165			
			Global health concerns and problems including						
		Anthropology & Global	poverty, urbanization, malnutrition, diet, war and						
Anthropology & Geography	ANTH 571	Health	refugees, climate, and environment.	Yes		Yes			
		- icarai	reragees, canate, and environment.						
			Critical evaluation of the nexus between space,						
			society and environment. An interdisciplinary						
			approach to studying the ways biological, material,						
			historical, political-economic and cultural						
			processes combine to shape human-environment						
Anthropology & Geography	ANTH 617	Place, Space & Adaptation	relationships in place-based contexts.	Yes		Yes		Yes	
Antinopology & deugraphy	ANTITI U1/	i iace, space & AuaptatiOII	relationships in place-based contexts.	103	I	100		103	

		1		ı	1	1	1	ı		
Art & Art History	LEAP 660	Arts Collaboration	Research, development and production of outreach projects; team projects for community engagement.		Yes	Yes		Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service,Other (please describe): Arts Collaboration is built around how to use the arts in connecting and transforming communities and cultures. Every module includes content and applications around how to authentically engage with typically underserved and under-represented communities. The summer 2022 course included a live project focused on re-painting the CSU RamWalk Street Mural. Students developed a program to include multiple communities across the entire university.
·										·
			Interdisciplinary studio/seminar course investigating art's relationship to the environment							Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or
A . O A	4 DT 524		through readings, field trips, presentations and			L.				Unit,Discussion/Recitation,Service Learning/Community
Art & Art History	ART 521	Art and Environment	studio practice.	Yes		Yes				Service
Atmospheric Sciences	ATS 543	Global Climate Change	Climate change science, climate change impacts, and climate change mitigation, including discussions of current topics in climate change.	Yes		Yes				
ranospiiene selences	7113313	Global cilliate change	anseassions of current topics in animate analysis	1.03		1.03				
Atmospheric Sciences	ATS 556	Climate Intervention to Cool a Warming Planet	Introduction to the climate system and its modification by human activities, different potential climate intervention methods, and the social, legal and political issues salient to the topic.	Yes		Yes		Yes		
Biology	BZ 568	Sustaining River Ecosystems	Applying the concepts and principles of freshwater ecosystem structure and function to develop a multidisciplinary and integrated understanding of the approaches and methods for restoring and sustainably managing these systems in the face of increasing human demands and rapid climate change.	Yes			Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitati on
		, , ,								
Civil & Environmental Engineering	CIVE 519	Irrigation Water Management	Soil, plant, water, and atmospheric engineering principles for the determination of crop water needs to sustain agricultural production and the environment.	Yes		Yes				
Civil & Environmental		Water Engineering	Planning and design of small-scale and low-cost water supply and wastewater systems for rural							
Engineering	CIVE 525	International Development	communities in developing countries.	Yes		Yes			Yes	
Civil & Environmental		Tools for FEW Systems	Analysis of complex food-energy-water (FEW) issues to explore prevailing relationships under varying conditions. Introduction to tools and approaches for systems thinking and FEW analysis, including frameworks for system analysis, data mining, life cycle assessment, triple bottom line					V		
Engineering	CIVE 527	Analysis	analysis, and multi-criteria decision analysis.	Yes	1	Yes		Yes		<u> </u>

		1						•	
			A broad overview of Food/Energy/Water (FEW)						
			nexus issues, including the science underpinning						
			FEW and the trade-offs, socio-economic constraints, and policy limitations inherent in FEW						
Civil & Environmental			challenges. Introduction to tools that enhance						
Engineering	CIVE 528	Assessing the FEW Nexus	systems-level thinking and problem solving.	Yes	Yes		Yes		
		Ĭ	, , , , , , , , , , , , , , , , , , , ,						
			Key principles and applications of state-of-the-art						
			technologies at the water-energy-health nexus.						
			Emerging technologies that produce clean water						
			and energy from unconventional water resources						
			such as wastewater and saline water, as well as new approaches (e.g., using environmental						
Civil & Environmental		Environmental Engr at the	nanotechnology) that prevent water-borne						
Engineering	CIVE 530	Water-Energy-Health Nexus	diseases beyond conventional disinfection.	Yes	Yes				
		0,	,						
			An interdisciplinary study comparing conventional						Lecture(s), Guest speaker(s), Assignments(s)/Graded
			and alternative land management practices, using						Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
College of Agricultural Sciences	AGRI 510	Sustainable Agriculture	an agroecosystem analysis approach.	Yes	Yes		Yes		on
			Investigate and evaluate the techniques of incorporating food production systems in the						
College of Agricultural Sciences	AGRI 515	Urban Horticulture	urban and peri-urban environment.	Yes	Yes				
			Impacts of ecological processes, use of mechanism	-					
		Managing for Ecosystem	based understanding, and tools used to manage						
College of Agricultural Sciences	AGRI 632	Sustainability	the ecosystem for sustainability.	Yes	Yes				
			Presents entrepreneurs and innovators as						
			powerful agents who can drive our movement to a sustainable economy and environment. Integrates						
			intellectual foundations of economics with						
			entrepreneurial thinking and applied knowledge of						
			the energy industry. Through simulations,						
			readings, examples and assignments, focuses on						
			specific venture strategies that are being utilized						
			to capture economic opportunities in various		l.,				Lecture(s),Guest speaker(s),Assignments(s)/Graded
College of Business	BUS 634	Sustainable Venturing	sectors.	Yes	Yes		Yes		Deliverable(s),Readings/Video/Podcast,Module or Unit
			Economic theories and analytical frameworks are						
		Economics of Ecosystems &	developed and applied to the use, protection, and						
College of Business	BUS 636	Biodiversity	management of the natural environment.	Yes			Yes		
			Estimation and risk identification, development of						Lecture(s), Assignments(s)/Graded Deliverable(s), Module or
College of Engineering	ENGR 531	Engineering Risk Analysis	mitigation techniques.	Yes				Yes	Unit
			The constitution and constitution are as a second						
			The quantitative and qualitative measure of cradle- to-grave impacts of products and services on the						
College of Engineering	ENGR 555	Life Cycle Assessment	environment, the economy, and society.	Yes					Lecture(s),Guest speaker(s),Readings/Video/Podcast,Lab(s)
Colorado School of Public			Major concepts, methodologies and issues in the						(-)
Health	PBHL 530	& Policy	field of environmental public health.	Yes	 Yes				
			Advanced theory, methods, and literature in						
_		Advanced Natural Resource	natural resource economics, including dynamic						Lecture(s),Guest speaker(s),Assignments(s)/Graded
Economics	ECON 740	Economics	programming and optimal control.	Yes		Yes	Yes		Deliverable(s)
Economics	ECON 741	Advanced Environmental Economics	Advanced theory, methods, and literature in environmental economics.	Yes	1	1	Yes		
ECONOMICS	ECON 741	ECONOMICS	environmental economics.	162			165		Lecture(s),Assignments(s)/Graded
		Political Economics: Race,	Economic approaches to inequality based on						Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Economics	ECON 771	Gender	race/ethnicity, gender, and class.		Yes			Yes	on

			T		1		1		1	1
										Assignments(s)/Graded
			Examination of the social and political contexts of							Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
English	E 605	Critical Reading and Writing	reading and writing policy and instruction.	Yes		Yes			Yes	on
										Assignments(s)/Graded
		Professional Concerns-	Professional concerns of secondary school							Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
English	E 632	English	teachers of English.		Yes	Yes			Yes	on
			Varied topics covering social, political, cultural or							
			historical areas, or literacy and rhetorical theory							Assignments(s)/Graded
		Specific Topics-	and practice, or professional and pedagogical							Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
English	E 633	Writing/Rhetoric	issues.	Yes		Yes			Yes	on
			Issues in environmental and occupational health							Lecture(s),Assignments(s)/Graded
Environmental & Radiological		Environmental &	sciences in the context of public health and							Deliverable(s), Readings/Video/Podcast, Discussion/Recitati
Health Sciences	ERHS 520	Occupational Health	regulatory concerns.	Yes		Yes			Yes	on
rieartii Sciences	LKI13 320	Occupational Health	regulatory concerns.	163		163			163	011
			F							
			Environmental transport and exposure assessment							
Environmental & Radiological			of radioactive and other contaminants; estimating							
Health Sciences	ERHS 570	Radioecology	risk for human health and ecological impacts.	Yes		Yes				
Forest & Rangeland			Overview of conservation governance issues at the							
Stewardship	NR 541	Conservation Governance	local, national, and international levels.	Yes		Yes				
			Myriad and often opposing views of societal and							
Forest & Rangeland		Multilevel Views: Society &	environmental problems across cultures and							
Stewardship	NR 545B	Conservation	across scales.	Yes		Yes				
Forest & Rangeland		Ecosystem Services in a	Understanding of ecosystem services and global							
Stewardship	NR 562	Changing World	change.	Yes		Yes		Yes		
			Social-ecological systems and the implication of							
Forest & Rangeland		Systems Thinking &	social-ecological systems thinking for biological							
Stewardship	NR 564	Biodiversity	diversity conservation efforts.	Yes		Yes				
Stewardship	1417.304	blodiversity	Analysis of basic and applied ecological principles	163		163				
Forest & Rangeland			involved in the restoration of drastically disturbed							
Stewardship	NR 578	Ecology of Disturbed Lands	lands.	Yes		Yes				
Stewarusnip	NK 3/6	Ecology of Disturbed Lanus	ialius.							
						163				
						163				/ \ C / \ / \ / \ / \
L			Analysis of environmental factors influencing			res				Lecture(s),Guest speaker(s),Assignments(s)/Graded
Forest & Rangeland		Advancd Ecological	restoration of disturbed lands and practices for			163				Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Forest & Rangeland Stewardship	NR 678	Advancd Ecological Restoration		Yes		163	Yes		Yes	· · · · · · · · · · · · · · · · · · ·
_	NR 678	-	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems.			163	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship	NR 678	-	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North			163	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
	NR 678	-	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems.			163	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape	NR 678	-	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North			Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape		Restoration	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to	Yes			Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape		Restoration	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance.	Yes			Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture		Restoration	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of	Yes			Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape	HORT 511	Restoration Green Roof Culture	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the	Yes Yes		Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape	HORT 511	Restoration Green Roof Culture	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the	Yes Yes		Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape	HORT 511	Restoration Green Roof Culture Urban Horticulture Horticulture and Human	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment. Impact of principles and practices of horticulture	Yes Yes Yes		Yes Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture	HORT 511	Restoration Green Roof Culture Urban Horticulture	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment. Impact of principles and practices of horticulture on human health and well-being.	Yes Yes		Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape	HORT 511 HORT 515 HORT 521	Green Roof Culture Urban Horticulture Horticulture and Human Health	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment. Impact of principles and practices of horticulture on human health and well-being. Principle and methods of screening food crops for	Yes Yes Yes		Yes Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture	HORT 511	Restoration Green Roof Culture Urban Horticulture Horticulture and Human	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment. Impact of principles and practices of horticulture on human health and well-being.	Yes Yes Yes		Yes Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape	HORT 511 HORT 515 HORT 521	Green Roof Culture Urban Horticulture Horticulture and Human Health	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment. Impact of principles and practices of horticulture on human health and well-being. Principle and methods of screening food crops for	Yes Yes Yes		Yes Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape	HORT 511 HORT 515 HORT 521	Green Roof Culture Urban Horticulture Horticulture and Human Health	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment. Impact of principles and practices of horticulture on human health and well-being. Principle and methods of screening food crops for traits related to human health.	Yes Yes Yes		Yes Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape	HORT 511 HORT 515 HORT 521	Green Roof Culture Urban Horticulture Horticulture and Human Health	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment. Impact of principles and practices of horticulture on human health and well-being. Principle and methods of screening food crops for traits related to human health.	Yes Yes Yes		Yes Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape	HORT 511 HORT 515 HORT 521	Green Roof Culture Urban Horticulture Horticulture and Human Health	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment. Impact of principles and practices of horticulture on human health and well-being. Principle and methods of screening food crops for traits related to human health. Horticulture is an essential instrument of public health, but often professionals in these fields view	Yes Yes Yes		Yes Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape	HORT 511 HORT 515 HORT 521	Green Roof Culture Urban Horticulture Horticulture and Human Health	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment. Impact of principles and practices of horticulture on human health and well-being. Principle and methods of screening food crops for traits related to human health. Horticulture is an essential instrument of public health, but often professionals in these fields view themselves as opponents. Examine issues arising	Yes Yes Yes		Yes Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape	HORT 511 HORT 515 HORT 521	Green Roof Culture Urban Horticulture Horticulture and Human Health	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment. Impact of principles and practices of horticulture on human health and well-being. Principle and methods of screening food crops for traits related to human health. Horticulture is an essential instrument of public health, but often professionals in these fields view themselves as opponents. Examine issues arising in the production of foods for human consumption	Yes Yes Yes		Yes Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati
Stewardship Horticulture & Landscape Architecture HORT 511 HORT 515 HORT 521	Restoration Green Roof Culture Urban Horticulture Horticulture and Human Health Crop Screening for Health	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment. Impact of principles and practices of horticulture on human health and well-being. Principle and methods of screening food crops for traits related to human health. Horticulture is an essential instrument of public health, but often professionals in these fields view themselves as opponents. Examine issues arising in the production of foods for human consumption that human health professionals often encounter.	Yes Yes Yes		Yes Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati	
Stewardship Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape Architecture Horticulture & Landscape	HORT 511 HORT 515 HORT 521	Green Roof Culture Urban Horticulture Horticulture and Human Health	restoration of disturbed lands and practices for successful restoration of disturbed ecosystems. Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance. Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment. Impact of principles and practices of horticulture on human health and well-being. Principle and methods of screening food crops for traits related to human health. Horticulture is an essential instrument of public health, but often professionals in these fields view themselves as opponents. Examine issues arising in the production of foods for human consumption	Yes Yes Yes		Yes Yes	Yes		Yes	Deliverable(s),Readings/Video/Podcast,Discussion/Recitati

			Application of the principles of pharmacology to						
			the production of food combinations that promote						
Horticulture & Landscape		Food Pharmacology,	human health. Horticultural food crops are						
Architecture	HORT 524	Horticulture, and Health	emphasized.	Yes		Yes			
Pricincecture	1101(1 324	Horacartare, and ricarar	emphasizea.	163		163			
			The contraction bishes the second contraction of the contraction of th						
			Theory, practice, history, terminology and issues						
			surrounding sustainable tourism development.						
			Sustainable tourism planning and management						
			are examined in the context of sustainable						
			livelihoods. A comprehensive survey of sustainable						
			tourism components – including indicators of						
			sustainability, community participation, poverty						
			alleviation, alternative tourism, governance and						Lecture(s), Assignments(s)/Graded
			power, and socio-environmental responsibility –						Deliverable(s),Readings/Video/Podcast,Module or
Human Dimensions of Natural			will be covered from a systems thinking						Unit, Discussion/Recitation, Service Learning/Community
Resources	NRRT 615	Sustainable Tourism	perspective.	Yes		Yes		Yes	Service
			Gain foundational knowledge of central						
			sustainability challenges, concepts and tools of						
			strategic management and entrepreneurship, and						
			discover the economic opportunities present in						
			the resolution of social and environmental issues.						
			Develop an understanding of the role of						
			corporations and entrepreneurs in resolving						
			market imperfections, addressing sustainability						
			challenges, and transitioning to a more sustainable						
		Strategic Oppsition Impact	economy. Introduce sustainability practices used						Lecture(s), Guest speaker(s), Assignments(s)/Graded
Management	MGT 663	Enterprise	by corporations and new ventures.	Yes		Yes		Yes	Deliverable(s),Readings/Video/Podcast,Module or Unit
			Global challengespoverty, environmental						
			degradation, public health, agriculture. Role of						Lecture(s), Guest speaker(s), Assignments(s)/Graded
		Global Social Sustainability	entrepreneurial management in private and public						Deliverable(s),Readings/Video/Podcast,Module or
Management	MGT 667	Entrepreneurship	sector.	Yes		Yes		Yes	Unit, Discussion/Recitation
			Early stages of a new venture, including creation of						
			business plan. Additional study of social						
		New Venture Development	entrepreneurship and sustainable business						Lecture(s), Guest speaker(s), Assignments(s)/Graded
Management	MGT 668	Social Enterpreneurship	strategies.	Yes		Yes		Yes	Deliverable(s),Readings/Video/Podcast,Module or Unit
			ÿ						(), ()
									Lecture(s),Guest speaker(s),Assignments(s)/Graded
		Marketing for Social	Customer and stakeholder value creation and						Deliverable(s),Readings/Video/Podcast,Module or
		Sustainability	capture. Marketing strategy with emphasis on						Unit, Discussion/Recitation, Service Learning/Community
Marketing	MKT 601	Entrepreneurship	social sustainable organizations.		Yes		Yes	Yes	Service
	502				1		1.7		
			Guides students in generating sustainable						
			products, services, and business models. Topics						
			build on a foundational understanding of markets						
			<u> </u>						
			and strategies that address triple bottom line						
			imperatives. Emphasizes applying design thinking						
			tools, cross-disciplinary insights, qualitative						
		Design Thinking for	research, low-fidelity prototyping, and			l.,		L	
Marketing	MKT 664	Sustainable Enterprise	experimentation.		Yes	Yes		Yes	

Sociology	SOC 564	Environmental Justice	different populations. Major classical and contemporary sociological	Yes	Yes			Assignments(s)/Graded
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Unequal distribution of environmental risks, benefits, policies, and regulatory practices across					
School of Social Work	SOWK 631	Advanced Community Practice	Preparing students to engage in and lead community practice that improves the well-being of individuals, families and communities, positively impacts the availability and impact of services and service delivery systems; and seeks to achieve social, economic, and environmental justice.	Yes	Yes	Yes		
Politcal Science	POLS 739	International Environmental Politics	Theories and methodologies used in analyzing international environmental politics and policy.	Yes	Yes			
Politcal Science	POLS 670	Politics-Environmental/ Sustainability	Domestic, international, and comparative dimensions of environment and natural resource politics and policy.	Yes	Yes	Yes		Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Politcal Science	POLS 541	Political Economy of Change & Development	Responses of the state and its institutions to political, economic, and social change.		Yes	Yes		
Politcal Science	POLS 532	Governance-World Political Economics	Theoretical and practical debates on the organization and governance of the world political economy.		Yes	Yes		
Mechanical Engineering Philosphy	MECH 516 PHIL 565	Seminar-Environmental Philosophy	economic feasibility and life cycle impacts. Aesthetic appreciation of nature, duties concerning fauna, flora, endangered species, ecosystem.	Yes	Yes	Yes	Yes	Unit,Discussion/Recitation Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
		Life Cycle Model Technology	Techniques for effective sustainability assessment of engineering process and products, including factors such as upstream energy and material burdens, model boundaries, sensitivity analysis, end of life, material and energy recycling, scalability, and optimization. Engineering process models will be used to assess technologies through					Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or

				Environmental	Environmental			Economic	Economic	
Department	Course #	Course Name	Course Description	Focused	Inclusive	Social Focused	Social Inclusive	Focused	Inclusive	How Sustainability is Integrated
			Explore tools and best practices for working with large							
			environmental datasets primarily using the							
			programming language R. Cover technical topics like:							
			data types, file management, iteration, functional							
			programming, debugging, code management and							
			collaboration with git and GitHub. Use these tools to							
			analyze environmental data using statistical							
Ecosystem Science &			approaches like: linear models, trend analysis, simple							Lecture(s),Guest speaker(s),Assignments(s)/Graded
Sustainability	ECC EOOA7	Environmental Data Science	machine learning techniques.		Yes		Yes		Yes	Deliverable(s),Readings/Video/Podcast
bustamability	E33 360A7	Elivirolillelitai Data Science	Focus on analyzing and understanding water resources		163		163		162	Deliverable(s), Readiligs/ Video/ Fodcast
			Examine key innovations in deep learning for							
			hydrological prediction and model parameterization,							
cosystem Science &		Environmental Data Science:	with a focus on cutting-edge techniques and hands-on							Lecture(s),Guest speaker(s),Assignments(s)/Graded
Sustainability	ESS 580A9	Water Resources	analyses.		Yes		Yes		Yes	Deliverable(s),Readings/Video/Podcast
			Biotic and abiotic processes responsible for distribution							
cosystem Science &		Biogeochemical Cycling in	and fluxes of elements at ecosystem, landscape, and							
ustainability	ESS 660	Ecosystems	global scales.	Yes			Yes			
cosystem Science &			Basic principles of water resource management							
Sustainability	WR 511	Water Resource Development	including surface and subsurface flows.		Yes					Lecture(s),Readings/Video/Podcast
Ecosystem Science &			Basics of water law and policy for Colorado, western							
Sustainability	WR 512	Water Law for Non-Lawyers	states, and the U.S.		Yes		Yes			Lecture(s)
			Science and engineering aspects of biobased fuel,							
			energy, and chemical production, including plant							
			biology, thermochemical conversion, biomass							
School of Global			deconstruction, fermentation, and biofuel properties.							Lecture(s),Guest speaker(s),Assignments(s)/Graded
Environmental			Aspects of sustainable production and economics will							Deliverable(s),Readings/Video/Podcast,Module or
Sustainability	GES 542	Biobased Products	be discussed.		Yes		Yes		Yes	Unit, Discussion/Recitation
oustainability	GE3 342	Issues Finance/Reporting &			163		res		162	Offic, Discussion / Necitation
Accounting	ACT 612	· · · · -	Contemporary and emerging issues at the intersection						Ves	Losturo(s)
Accounting	ACT 612	Auditing	of financial reporting and auditing.						Yes	Lecture(s)
Agricultural & Resource		Applied Advanced Water	Theory and application of economics in water resource							
Economics	AREC 542	Resource Economics	planning.		Yes		Yes	Yes		
			Philosophical foundations of science and research.							
Agricultural & Resource		Methodology-Economic	Concepts and skills for planning, performing, reporting,							
conomics	AREC 570	Research	and evaluating economic research.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
			Empirical application and analysis of production and							
Agricultural & Resource			cost issues in the agricultural and natural resource							Assignments(s)/Graded
conomics	AREC 605	Agricultural Production	sectors.		Yes		Yes		Yes	Deliverable(s),Readings/Video/Podcast
			Theory and practice of optimization techniques used in							
Agricultural & Resource		Optimization Methods for	economic applications with emphasis on linear and							
Economics	AREC 615	Economics	nonlinear programming.		Yes		Yes	Yes		Lecture(s), Assignments(s)/Graded Deliverable(s)
										(, , , , , , , , , , , , , , , , , , ,
			Introduction to fungal biology, including ecology,							
			physiology, genetics and diversity of fungal pathogens.		1				1	
		1	Explore fungal lifecycles, modes and genetics of fungal		ĺ					
		1	mating and sources of genomic variation, and fungal		ĺ					Lecture(s), Assignments(s)/Graded
Agricultural Biology	AB 554	Fungal Plant Pathogens	pathogenesis.		Yes				Yes	Deliverable(s),Discussion/Recitation
Bilcultural DiOlOgy	MD J34	i diigai riant ratilogens	partiogenesis.		162				165	Deliverable(3), Discussion/ Necitation
			takan darakina ka madaraka sakan lasarakan i							
			Introduction to graduate school covering managing							
		Foundations Bioagriculture	time, advisor and research, plus a survey of topics							
Agricultural Biology	BSPM 500	Sciences	encompassed by the department of BSPM.		Yes		Yes			Lecture(s),Readings/Video/Podcast,Discussion/Recitation
		1			ĺ					
			Principles of plant-microbe interactions, physiological		1				1	
		Molecular Plant-Microbe	and molecular aspects of plant defense, genomic		1				1	Lecture(s), Assignments(s)/Graded
Agricultural Biology	BSPM 550	Interactions	approaches to study plant defense.	1	Yes	1	Yes	1	Yes	Deliverable(s),Readings/Video/Podcast

			Advances in study of organization and function of						
			nuclear and organellar genomes, gene expression in						
Agricultural Biology	BSPM 740	Plant Molecular Genetics	higher plants, and plant-microbe interactions.	Yes					Lecture(s), Assignments(s)/Graded Deliverable(s)
Agricultur Biology	D31 1V1 7 40	riant molecular deficites	Nutrients and nutrient function required to support	103					Ecotare(5)), issignments(5)) ordered Benveralsic(5)
			animal life through all physiological states and						
		Animal Nutrition, Emissions, and	assessment of the impacts on gaseous emissions from						
Animal Sciences	ANEQ 626	Management	these animals.	Yes					
	7.112.4 020		Microbial degradation, transformation, and synthesis	100					
			of ingested nutrients; feed particle passage kinetics in						Lecture(s), Assignments(s)/Graded
Animal Sciences	ANEQ 725	Rumen Metabolism	the rumen.		Yes		Yes	Yes	Deliverable(s), Discussion/Recitation
			Gender and sexuality cross-culturally; theory, cultural				1		
			constructions, colonialism, class, race, ethnicity, health,						
Anthropology & Geography	ANTH 521	Gender, Sexuality, and Culture	violence.			Yes		Yes	
. 9, 9 . ,		i i							
			Examines the legal foundations of artistic creation						
			including copyright, freedom of expression, public						
			domain laws, and contract negotiation. Law and the						
			Arts includes a module (module 12) focused on HR Law						
			and Diversity, Equity and Inclusion. The course also						Lecture(s),Guest speaker(s),Assignments(s)/Graded
			includes guest speakers addressing leadership in						Deliverable(s),Readings/Video/Podcast,Module or
Art & Art History	LEAP 670	Law and the Arts	authentically DEI focused arts organizations.				Yes	Yes	Unit, Discussion/Recitation, Other (please describe):
,			, ,						, , , , , , , , , , , , , , , , , , , ,
			A survey of past climate and Earth system states, from						
1 '			the Archean to the Holocene. Special emphasis on						
1 '			extreme climates (pre-oxygenated atmosphere,						
1 '			Snowball Earth, and super greenhouse climates),						
1 '			Pleistocene glacial-interglacial cycles, and on time						
1 '			periods where there remains substantial model-data						
1 '			disagreement (early Eocene, Heinrich events). Role of						
1 '			paleoclimate in understanding future warming and						
Atmospheric Sciences	ATS 580B1	Paleoclimate	evolution of the Earth system.		Yes				Lecture(s),Readings/Video/Podcast,Discussion/Recitation
			Global energy balance, surface energy balance, the						2
			hydrological cycle, atmosphere general circulation,						
			ocean general circulation, climate variability, climate						
Atmospheric Sciences	ATS 606	Introduction to Climate	sensitivity and feedbacks.	Yes					
İ			Concepts of electromagnetic and acoustic wave						
1 '			propagation; active and passive remote sensing						
1 '			techniques including radar, lidar, thermal emission						Lecture(s), Guest speaker(s), Assignments(s)/Graded
Atmospheric Sciences	ATS 652	Atmospheric Remote Sensing	systems.	Yes				Yes	Deliverable(s),Readings/Video/Podcast
			Scientific misconduct; ethical publishing; record						Lecture(s),Guest
			keeping; data management; professional skills						speaker(s),Readings/Video/Podcast,Module or
Atmospheric Sciences	ATS 693	Responsible Research	applicable to atmospheric science.				Yes		Unit,Discussion/Recitation
1		1	Atmospheric hydrocarbon and nitrogen oxide		1				Lecture(s), Assignments(s)/Graded
1 '			reactions; aqueous phase scavenging and reactions;						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Atmospheric Sciences	ATS 715	Atmospheric Oxidation Process	chemical pathways in the atmosphere.	Yes					n
			Hydrologic cycle, moisture transport and air-ground						
			exchange; water budgets of meteorological						Lecture(s), Guest speaker(s), Assignments(s)/Graded
Atmospheric Sciences	ATS 753	Global Hydrologic Cycle	phenomena; climatology of atmospheric water.	Yes				Yes	Deliverable(s),Readings/Video/Podcast
		Physiological Ecology Marine	Physiological adaptations of vertebrates to different					 	
Biology	BZ 515	Vertebrates	marine environments.		Yes		Yes	Yes	Lecture(s), Readings/Video/Podcast, Discussion/Recitation
									Lecture(s),Guest speaker(s),Assignments(s)/Graded
		Advanced Conservation	Population genetic theory and application of genomic						Deliverable(s),Readings/Video/Podcast,Lab(s),Discussion/Re
Biology			of the contract of the contrac	Yes					citation
	BZ 525	Genomics	methods to conservation.		<u> </u>				
ļ ,	BZ 525	Genomics							
	BZ 525		Principles and methods for building, analyzing, and						
Biology	BZ 525 BZ 548	Genomics Theory-Population & Evolution Ecology			Yes				Lecture(s),Assignments(s)/Graded Deliverable(s),Lab(s)
1	BZ 525		Principles and methods for building, analyzing, and						

		I	T						
			Nature of science, scientific reasoning, scientific						
			argumentation, communication theories, and						Lecture(s), Assignments(s)/Graded
			instructional strategies are explored. Develop science						Deliverable(s),Readings/Video/Podcast,Module or
		Totals and Communicate	argumentation and communication skills in						Unit, Discussion/Recitation, Other (please describe):
Biology	BZ 560	Teach and Communicate Science	undergraduate courses and in informal settings. Create materials for a professional portfolio.		Yes		Yes	Yes	conservation, environmental sustaibility, and environmental justice were built into discussions through the readings.
ыогоду	BZ 300	Science	materials for a professional portiono.		res		res	res	justice were built into discussions through the readings.
			Molecular mechanisms involved in development of						
			nervous system including differentiation, growth,						
Biomedical Sciences	BMS 503	Developmental Neurobiology	pathfinding, and synaptogenesis.		Yes		Yes		Lecture(s),Discussion/Recitation
			Journal club style seminar focusing on ethical issues						
			that arise around assisted reproductive techniques in						
			humans. Open discourse around controversial topics						
		Ethical Issues in Human Assisted	ranging from genetic modification of embryos to						
Biomedical Sciences	BMS 742	Reproduction	LGBTQIA reproductive rights.			Yes			
Chemical & Biological			Fermentation technology, bioprocess control, and						
Engineering	CBE 505	Biochemical Engineering Lab	protein purification.		Yes			Yes	Lecture(s),Lab(s)
			Fundamentals of an improved bisks to 1						
Chemical & Biological		Advanced Biological Mastervator	Fundamentals of environmental biotechnology: environmental microbiology, microbial kinetics, basic						
Engineering	CBE 540	Processing	reactor design, wastewater treatment.	Yes			Yes		
Linguisecting	052 5 10	11000331116	Fundamentals of polymer chemistry: synthesis,	100					
Chemistry	CHEM 515	Polymer Chemistry	characterization, physical properties.		Yes			Yes	Lecture(s)
Chamista	CHEM 532	Advanced Chemical Analysis II	Advanced optics; instrumentation and methodology for analytical spectroscopy; computer applications.		Yes				Lecture(s)
Chemistry	CHEIVI 332	Advanced Chemical Analysis II	analytical spectroscopy; computer applications.		res				Lecture(s)
			Theory and methods of electrochemistry; applications						Lecture(s), Assignments(s)/Graded
Chemistry	CHEM 537	Electrochemical Methods	of modern electrochemical techniques.		Yes				Deliverable(s),Lab(s),Discussion/Recitation
			Preparation for advanced studies in metal-mediated						
Chemistry	CHEM 560	Foundations Inorganic Synthesis	chemistry; essential aspects of inorganic structure,		Yes				Lecture(s)
Chemistry	CHEIVI 300	Foundations morganic synthesis	thermodynamics and reactivity.		res				Lecture(s), Assignments(s)/Graded Deliverable(s), Module or
Chemistry	CHEM 563B	Vibrational Spectroscopy	Modern experimental methods in inorganic chemistry.		Yes				Unit
		Electronic Structure &							
Chemistry	CHEM 563C	Magnetism	Modern experimental methods in inorganic chemistry.		Yes				Assignments(s)/Graded Deliverable(s)
			Principles of chemical biology. Chemical methods for						
Chemistry	CHEM 521	Principles of Chemical Biology	understanding and controlling the structure and function of biopolymers.	Yes					Lecture(s),Other (please describe): Part of a project
Chemistry	CITEIVI 321	r finciples of chemical biology	Tunction of biopolymers.	163					Lecture(3),Other (please describe). Fait of a project
			Influence of wind on humanity. Applications to						
Civil & Environmental			structures, air pollution, wind energy, agricultural						
Engineering	CIVE 504	Wind Engineering	aerodynamics, snow movement, human comfort.		Yes		Yes		
			Coastal processes (waves, tides, storm surge, currents,		1	1	1		
Civil & Environmental			coastal morphology, deltas) and their effects on			ĺ			
Engineering	CIVE 511	Coastal Engineering	infrastructure design and eco-protection.	Yes	1	1	Yes		
			Basic principles and applications of quantitative						
			exposure science with an emphasis on exposure						
			measurement; exposure pathway and data analysis;						
Civil & Environmental		Pollution, Exposure, and the	exposure modeling; and the development and application of novel methodological, technological, and						
Engineering	CIVE 526	Environment	statistical tools for exposure science.	Yes			Yes		
							"		
			Management and planning of natural and constructed		1	1			Lecture(s),Assignments(s)/Graded
Civil & Environmental		Water Resources	water systems. Integrated management and case		1	1			Deliverable(s),Readings/Video/Podcast,Module or
Engineering	CIVE 544	Planning/Management	studies of water use and environmental resources.		Yes	<u> </u>	Yes	Yes	Unit, Discussion/Recitation

							ı			
			Mechanics and methodology of foundation							
			engineering, selection and design of foundation							
Civil & Environmental			systems, retaining wall design, and application of							Lecture(s), Assignments(s)/Graded
Engineering	CIVE 550	Foundation & Wall Engineering	principles to related special problems.		Yes				Yes	Deliverable(s),Readings/Video/Podcast
Engineering	0.72.550	Tourisday of the Engineering	Modern structural load modeling and analysis		103				163	Denverable(S)//redamigs/ viaco/ rodease
Civil & Environmental			techniques for buildings and other structures exposed							
Engineering	CIVE 564	Structural Load Modeling	to natural and man-made hazards.		Yes		Yes			
		_	Behavior and design of structures and structural							
Civil & Environmental			components constructed of masonry or engineered							
Engineering	CIVE 568	Masonry and Wood Structures	wood.		Yes					Lecture(s), Discussion/Recitation
			Water supply, wastewater, stormwater, oil and gas,							Lecture(s), Assignments(s)/Graded
Civil & Environmental			and industrial applications. Emphasis on pressurized							Deliverable(s),Readings/Video/Podcast,Module or
Engineering	CIVE 571	Pipeline Engineer & Hydraulics	water pipelines.		Yes		Yes		Yes	Unit,Discussion/Recitation
0: 10 5			Infrastructure and utility planning, management, and							Lecture(s),Assignments(s)/Graded
Civil & Environmental	011/5 570	Infrastructure and Utility	security. Systems approach to life cycle management.		.,		.,		.,	Deliverable(s),Readings/Video/Podcast,Module or
Engineering	CIVE 578	Management	Problems, analysis, decision support systems.		Yes		Yes		Yes	Unit,Discussion/Recitation
			Analysis and design for assisting the recovery of							
Civil & Environmental			hydrologic, geomorphic, and ecological processes and							
Engineering	CIVE 613	River Restoration Design	ecosystem services in degraded river systems.	Yes						
Linginicering	CIVE 015	Niver Nestoration Design	Analysis, behavior, and design of structural systems	163						
Civil & Environmental		Structural Dynamics &	subjected to dynamic loads, including earthquakes,							
Engineering	CIVE 767	Earthquake Engineering	wind, and ocean waves.				Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
			Overview of the normal physiology and						1.00	Lecture(s), Discussion/Recitation, Other (please describe):
			pathophysiology of disease states of mammalian organ							Since this is a physiology course, we address social
Clinical Sciences	VS 628	Physiology and Pathophysiology	systems.				Yes			sustaibility from the perspective of health and well-being.
		7	Basic orientation to food animal production units, herd							, , , , , , , , , , , , , , , , , , , ,
			health concepts, and issues of food safety from							Lecture(s),Guest speaker(s),Assignments(s)/Graded
Clinical Sciences	VS 648	Food Animal Production	preharvest through processing and distribution.		Yes		Yes		Yes	Deliverable(s)
										Lecture(s), Assignments(s)/Graded
College of Agricultural			Origination, purpose, and policy effects on land-based							Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Sciences	AGRI 637	Understanding Policy	enterprises; policy effects on management decisions.		Yes		Yes		Yes	n
										Lecture(s),Guest speaker(s),Assignments(s)/Graded
			Management of human capital for competitive							Deliverable(s),Readings/Video/Podcast,Module or
College of Business	BUS 626	Managing Human Capital	advantage and superior results.				Yes			Unit,Discussion/Recitation
C (D :		Business Economics for World	Application of economic principles to current business		.,		.,			
College of Business	BUS 635	Market	problems within context of global marketplace.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
			Value-driven supply chain principles, design and management of supply chains, and supply chain							
College of Business	BUS 650	Supply Chain Management	management of supply chains, and supply chain management software and applications.		Yes				Yes	Lecture(s),Guest speaker(s),Discussion/Recitation
College of Busiliess	BU3 030	Supply Chain Management	management sortware and applications.		ies				res	Lecture(s), Guest speaker (s), Discussion, Recitation
			Basic marketing strategy analysis, formulation,							Lecture(s),Assignments(s)/Graded
College of Business	BUS 656	Marketing Strategy & Planning	evaluation and implementation concepts and tools.		Yes		Yes		Yes	Deliverable(s), Discussion/Recitation
		,								(4)
			Application of business practices in graduate education,							
			synthesizing knowledge from various courses.							
			Presentation of content and experiential learning,							
			development of business venture plans, and							Lecture(s),Guest
College of Business	BUS 665	MBA Capstone	application of MBA program concepts.		Yes			Yes		speaker(s),Readings/Video/Podcast,Module or Unit
			Introduction to modern microscopy techniques for							
			materials research using optical microscopy.							
			Interferometry and confocal techniques, scanning							
Called of Factors	NACE 5005	Mantaniala Maiana	electron, microscopy transmission electron microscopy,	1	V					Lecture(s),Assignments(s)/Graded
College of Engineering	IVISE 502C	Materials Microscopy	and scanning probe microscopy.	<u> </u>	Yes	<u> </u>	l	1	1	Deliverable(s),Lab(s),Discussion/Recitation

			The investigation and measurement of spectra						
			produced when matter interacts with or emits						
			electromagnetic radiation, including an introduction to						
			X-ray photoelectron spectroscopy, electron energy loss						
			spectroscopy, Raman and infrared, and energy						Lecture(s), Assignments(s)/Graded
College of Engineering	MSE 502D	Materials Spectroscopy	dispersive spectroscopy for materials research.	Yes					Deliverable(s),Readings/Video/Podcast
College of Engineering	IVISE 302D	iviaterials spectroscopy	dispersive spectroscopy for materials research.	res					Deliverable(s), Readings/ video/ Foucast
			Sensing, sampling, filtering, transducing, and						
			transmission of information to transform physical data						
			to the digital domain. Subsequent processing of image						
			and digital data, restoration, analysis and classification						
			to problems in inspection, authentication, color						Lecture(s), Assignments(s)/Graded
College of Engineering	SYSE 512	Sensing and Imaging Analysis	science, biometrics, and signal/image characterization.	Yes		Yes		Yes	Deliverable(s), Discussion/Recitation
conege of Engineering	3132 312	Scholing and imaging Analysis	Observation/classification of systems architecture.	163		103		103	Deliverable(3),Discussion/ Necitation
		Customs Engineering							
		Systems Engineering	Systems architecture principles and critical evaluation						
College of Engineering	SYSE 567	Architecture	through design studies.	Yes		Yes			Lecture(s)
1		ĺ			I	I			
		1	Challenge-driven overview of the diversity of control		I	I			
		1	paradigms for modern, dynamic engineering systems		I	I			
		1	for realizing desired system behaviors. Topics include		1	1			
			linear, nonlinear, optimal, robust, decentralized, and		1	1			
			hierarchical control methods. Examples from aero-		1	1			
			actuation, space, energy, thermal, chemical, and						
College of Engineering	SVSF 580A1	Control Engineering for SE	financial systems are presented.					Yes	Lecture(s)
College of Engineering	313L 300A1	Control Engineering for 3E	illiancial systems are presented.					163	Lecture(s)
			Administrative functions, organization, politics, and						Lecture(s),Guest speaker(s),Assignments(s)/Graded
			problems associated with city government. In-depth						Deliverable(s),Readings/Video/Podcast,Module or
College of Liberal Arts	PPA 560	City Management	study of the administrative management of US cities.	Yes		Yes		Yes	Unit,Service Learning/Community Service
									Assignments(s)/Graded
									Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
College of Liberal Arts	PPA 660	Theories of the Policy Process	Recent developments in public policy.	Yes		Yes		Yes	n
			The practice of policy analysis and the tools used to						Lecture(s),Guest speaker(s),Assignments(s)/Graded
			conduct an analysis including: forecasting, cost benefit						Deliverable(s), Discussion/Recitation, Service
College of Liberal Arts	PPA 665	Public Policy Analysis	analysis, cost effectiveness analysis, and policy design.	Yes		Yes		Yes	Learning/Community Service
		<i>,</i> ,	, , , , ,						,
			Examines big data research through an applied						
1		1	interdisciplinary approach to ethical issues surrounding		1	1			
1		1	collection, use, reporting, and preservation of big data.		I	I			
		1	Incorporates a wide range of transferable skills training,		1	1			
					1	1			
0.11 (1)		L	so students are well equipped to engage and lead data-	.,	1	l.,			
College of Natural Sciences	NSCI 575	Big Data Ethics	centric research within or outside academia.	Yes		Yes			Lecture(s),Readings/Video/Podcast,Discussion/Recitation
			Introduction to the basic concepts and skills needed to						
			create programs for data management and analysis						
			using SAS software. Explores how to manipulate and						
			prepare data for analysis in SAS (including inputting,						
Colorado School of Public			recoding, reformatting, subsetting, and merging data),						Lecture(s),Guest speaker(s),Assignments(s)/Graded
Health	PBHL 534	Data Management Using SAS	and perform data analysis and write reports.	Yes		Yes			Deliverable(s),Lab(s)
	. 5112 554		200 200 200 200 200 200 200 200 200 200						
					1				
			Explore the social, behavioral, and cultural factors that		1	1			
		ĺ	affect the health of individuals and populations and,		İ	I			
			thus, contribute to health inequities. Investigate topics		1	1			
			such as structural bias, racism and social inequities that		1	1			
			impact community health. Examine development,		1	1			
Colorado School of Public		Applied Social Community	implementation and evaluation of programs and		İ	I			
Health	PBHL 550	Health Factors	policies to promote and sustain healthy communities.		Yes	1			
ricular	1 DITE 330	riculti i actors	policies to promote and sustain healthy communities.		1103	1	1	1	l

	1		1	ı		1			
			Descriptive and analytic methods in epidemiology and						Lecture(s),Assignments(s)/Graded
Colorado School of Public			their application to research and practice in the field of						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Health	PBHL 570	Epidemiology for Public Health	public health.	Yes		Yes		Yes	n
									Lecture(s),Assignments(s)/Graded
Colorado School of Public			Concepts, principles and skills needed for conducting						Deliverable(s),Lab(s),Discussion/Recitation,Service
Health	PBHL 575	Epidemiological Research	epidemiological research in public health.	Yes		Yes		Yes	Learning/Community Service
			Survey of current theory and practice connected to						Lecture(s), Assignments(s)/Graded Deliverable(s), Module or
Communication Studies	SPCM 508	Deliberative Theory & Practice	deliberative democracy.			Yes			Unit,Discussion/Recitation
			Organizational, interpersonal, and intercultural						
			dimensions of communicating in health care						
Communication Studies	SPCM 538	Relating & Organizing for Health			Yes				
									Assignments(s)/Graded
			Advanced readings in particular themes, questions, and						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Communication Studies	SPCM 7924	Rhetoric and Civic Engagement	topics pertaining to rhetoric and/or civic engagement.	Yes	Yes			Yes	n
Communication Studies	SI CIVI 732A	Thirteene and eithe Engagement	topics per tunning to metoric unity or civic engagement.	103	103			103	Lecture(s), Assignments(s)/Graded
		Advanced Communication	Advanced research method(s) in the field of						Deliverable(s), Readings/Video/Podcast, Module or
Communication Studies	SPCM 793	Research Methods	Communication Studies.			Yes			Unit, Discussion/Recitation
Communication studies	SPCIVI 793	Research Methods	Communication Studies.			res			Offic, Discussion / Recitation
			Decign construction and testing of business						
Commuter Information		Application Coftware	Design, construction, and testing of business						
Computer Information		Application Software	application software infrastructure including hardware,						
Systems	CIS 606	Infrastructure	operating software, and communications network.	Yes				Yes	Lecture(s),Readings/Video/Podcast,Discussion/Recitation
			Achieving high reliability and fault tolerance. Fault						
			modeling, testing, reliability evaluation, redundancy,						
Computer Science	CS 530	Fault-Tolerant Computing	fault tolerance. (NT-O)	Yes		Yes		Yes	Lecture(s),Lab(s)
			Evaluation of psychological, sociological, and cultural						
			theories of consumer behavior through examination of						Lecture(s),Readings/Video/Podcast,Module or
Design & Merchandising	DM 510	Consumer Behavior	factors that influence decision making.	Yes		Yes			Unit,Discussion/Recitation
									Lecture(s),Assignments(s)/Graded Deliverable(s),Other
		Advanced Computer-Aided	Use of computer-aided design system to produce fabric						(please describe): Cultural Appropriation in textile design fil
Design & Merchandising	DM 542	Textile Design	designs for apparel or interior professional end use.	Yes		Yes			research project
			Introduction to theoretical concepts, philosophies, and						
			psychosocial processes associated with design thinking						
			in design and non-design contexts. Drawing from						
			perspectives in design cognition, cognitive psychology						
			and the learning sciences, human-centered interaction,						
			and creativity. Examine how design thinking facilitates						
			understanding of our environment; identify and						Lecture(s), Assignments(s)/Graded
			manage ill-defined societal problems, and						Deliverable(s),Readings/Video/Podcast,Module or
			communicate with diverse stakeholders and team						Unit,Discussion/Recitation,Service Learning/Community
Design & Merchandising	IDEA 510	Design Thinking Processes	members.	Yes	Yes			Yes	Service
							1		Lecture(s),Assignments(s)/Graded
			Analysis and evaluation of tax policy in terms of				I		Deliverable(s),Readings/Video/Podcast,Module or
Economics	ECON 520	Public Economics I	efficiency and equity.			Yes		Yes	Unit,Discussion/Recitation
			Philosophical foundations of science and research.						
		Methodology-Economic	Concepts and skills for planning, performing, reporting,						
Economics	ECON 530	Research	and evaluating economic research.	Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
			Methodological approaches in regional economics:				I		
			general equilibrium, input-output, computable general				1		
Economics	ECON 663	Urban and Regional Modeling	equilibrium models; social accounting matrices.	Yes		Yes	1	Yes	Lecture(s),Module or Unit
			Analysis of fundamentals of economic development						Lecture(s),Assignments(s)/Graded
		Theories-Economic	(processes, problems, and strategies) with special						Deliverable(s),Readings/Video/Podcast,Module or
Economics	ECON 760	Development	reference to developing nations.			Yes		Yes	Unit,Discussion/Recitation
			Theory of international trade including comparative						
1			advantage, factor growth, market distortions, and				1		
Economics	ECON 640	International Trade Theory	commercial policy.	Yes		Yes	Yes		Lecture(s),Readings/Video/Podcast,Discussion/Recitation

Environment & Standard Secretary Company Commons Technique (Secretary Commons Comm									
Experience (COLA Section Secti									Lecture(s),Assignments(s)/Graded
Regish (20) Averageing (aboraces based shops) in classroom- based legisly into anal and writer history pactors. Prigish (20) Averageing (aboraces based legisly into anal and writer history pactors. Prigish (20) Averageing (aboraces based legisly into anal and writer history pactors. Prigish (20) Averageing (aboraces based legisly into anal and writer history pactors. A semina-based data continue greatly and class and into an interview of pactors. A semina-based data continue greatly and crafts on a device of pactors of pactors of pactors. Prigish (20) A semina-based data continue greatly and crafts on a device of pactors of			Enviromental & Natural	Theory, methods, and policy in environmental and					Deliverable(s),Readings/Video/Podcast,Module or
Lighth 7 523 investigating literacies become methods and white in classroome. New County of the Coun	Economics	ECON 540	Resource Economics	natural resource economics.	Yes		Yes	Yes	Unit,Discussion/Recitation
Description in Control of the Association of Part (Control of Part) in mestigrating interaces. Description in the control of and written interacy practices. Control of Part (Control of Part) Control of Par									Lecture(s),Guest speaker(s),Assignments(s)/Graded
Legistry P 533 Investigating uiteracies based inquiry with critical and unique interval in the water's port of view with emphasis on immand believation. Crigitify P 531XC Uiterature: Easy with emphasis on immand believation. Crigitify P 531XC Uiterature: Easy with emphasis on immand believation. Crigitify P 531XC Uiterature: Easy with emphasis on immand believation. Crigitify P 531XC Uiterature: Easy with emphasis on immand believation. A seamon-based data continuing crastale and critical based experiments with traditional telescent of critical tradeous literature and critical based experiments with tradeous literature and critical based experiments with tradeous literacy critical grants. Critical P 5433 Cyrif Approaches to Districtive Cerebic months of particular problems, possible tradeous problems, packed by the packed problems in the packed problems. Problems and packed packed in the packed problems and packed problems. Problems and problems and packed problems. Problems and packed problems and packed problems and packed problems and packed packed in the packed problems. Problems and packed packed in the packed packed packed in the packed packed packed problems and packe				Research methods and ethical issues in classroom-					
Selected readings in and discussors of modern literature Easy A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size Bodies deposition to the combining residue and cell-size A terminal passed data combining residue and cell-size Bodies deposition to the combining residue and cell-size A terminal passed data combining residue and cell-size Bodies deposition to the cell-size A terminal passed data combining residue and cell-size Bodies deposition to the cell-size A terminal passed data combining residue and cell-size Bodies deposition to the cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data combining residue and cell-size A terminal passed data	English	E E02	Investigating Literacies				Voc		
Fergish 533C (Userature Essay) with emphasis of the market report of view per point	Eligiisii	E 303	investigating Literacies	based inquiry into oral and written interacy practices.			res		Offit, Discussion/ Recitation
Form & Technique - Modern English Eng									
Fergish 533C (Userature Essay) with emphasis of the market report of view per point									
Fergish 533C (Userature Essay) with emphasis of the market report of view per point									
Fergish 533C (Userature Essay) with emphasis of the market report of view per point									
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Egilish C 513 C Ubrature: Essay with emphasis on form and technique. A seminar-based disperiments with traditional Elerary critical approaches to warrious topic yellifety poorby, feton, the properties of the seminary and properties to warrious topic yellifety poorby, feton, or dozen a feminary thrifty and properties. Yes Personnential & Radiological Health Sciences Environmential & Radiological			Form & Technique -Modern	literature and criticism from the writer's point of view					
A seminar-based diss combining creative and craft-based dissocratification. We see that the craft of	English	F 513C	· ·	•			Yes		Readings/Video/Podcast
Based experiments with traditional literary critical approaches to Uterature December of the property of t		2 3 2 3 0					103		6-7
Based experiments with traditional literary critical approaches to Uterature December of the property of t				A cominar based class combining creative and craft					
English E 643 Craft Approaches to Userature creatment expired genes. Pes Ves Ves Ves Ves Oscussion/Recitation Foreignmental & Commental &				=					
English E 643 Craft Approaches to Literature or eather con-fiction, and other alternate hybrid genes. Broad overview of biological basis of underlying major public health problems, focusing on risk factors, patitive health problems, focusing on risk factors, patitive health problems, focusing on risk factors, patitive health problems, focusing on risk factors, patitive health problems, focusing on risk factors, patitive health problems with our understanding of the clinical terminology, the underlying biological major organ systems and associated diseases. Describe and identify public health problems with an understanding of the clinical terminology, the underlying biological mechanisms, and the biological major organ systems and associated diseases. Describe and identify public health. Sciences E845.501 Biological Basis Public Health Cancer biology will address each of the hallmarks of cancer, including sustained profilerable signaling, existing growths approached, in some page resist, or solding or growths approached, in some page resist, or solding or global propage and profilerable signaling, existing organisms, organization, the propage and profilerable signaling, existing organisms, organization, the profilerable signaling, existing and profilerable signaling and profilerable signaling and profilerable signaling				1 · · · · · · · · · · · · · · · · · · ·					
Broad overview of biological basis of underlying major public health problems, focusing on risk factors, pathogenesis, and pathophysiology, plus a review of the anatomy and physiology of selected major organ systems and associated disease. Describe and identify public health groblems with an understanding of the clinical terminology, the underlying biological metals clinical terminology. The underlying biological metals clinical terminology are underlying biological mechanisms, and the biological disease in Sciences ERHS 501 Biological Basis Public Health Cancer biology will address each of the hallmarks of cancer, including sustandine of different weighing, evasion of growth suppression, invasion and metastasis, replicative immortality, analogenesis, resisting cell death, genome instability and mutation, turnor promoting inflammatinic, deregulation of cellular energetics and avoidance of immune destruction. Environmental & Radiological Health Center Biology Cancer Biology Cancer Biology Trevention of cancer. ERHS 520 Cancer Biology Cancer Biology Trevention of cancer. ERHS 527 Industrial Hygiene Laboratory Radiological Health Sciences ERHS 527 Radiological Health Sciences ERHS 528 Radiological Health Sciences ERHS 529 Radiological Health Sciences ERHS 530 Dosimetry Radiological Health Sciences ERHS 530 Dosimetry Radiological Health Sciences ERHS 530 Dosimetry Radiological Health Sciences ERHS 530 Dosimetry Radiological Health Sciences ERHS 530 Dosimetry Radiological Health Sciences ERHS 530 Dosimetry Radiological Health Sciences ERHS 530 Dosimetry Radiological Health Sciences ERHS 530 Dosimetry Radiological Health Sciences ERHS 540 Application of basic radiation biology to the clinical application of basic radiation biology to the clinical application of fasters evaluated to the clinical application of fasters reduced to the licens application of the science in several termination and reduced felects of chemical supplication of reduced and polication r				1					
public health problems, focusing on risk factors, pathogenesis, and pathophysiology, plas a review of the anatomy and physiology of selected major organ systems and associated diseases. Describe and identify public health problems with an understanding of the clinical terminology, the underlying biological mapt of disease in public health problems with an understanding of the clinical terminology, the underlying biological mapt of disease in public health for cancer, including sustained proliferative signaling, evision of growth suppression, invasion and metastasis, replicative immortality, angiogenesis, resisting cell death, genome instability and mutation, tumor promoting inflammation, deregulation of cellular energetics and avoidance of immune destruction. Lectures will integrate the biology behind these hallmarks with strategies for the treatment and grewnition of cancer. Plance of the physical systems with chiraces the biology behind these hallmarks with strategies for the treatment and grewnition of cancer. Peer security of the physical systems with price and proving inflammation, described by a pr	English	E 643	Craft Approaches to Literature	creative non-fiction, and other alternate hybrid genres.		Yes	Yes	Yes	Discussion/Recitation
public health problems, focusing on risk factors, pathogenesis, and pathophysiology, plas a review of the anatomy and physiology of selected major organ systems and associated diseases. Describe and identify public health problems with an understanding of the clinical terminology, the underlying biological mapt of disease in public health problems with an understanding of the clinical terminology, the underlying biological mapt of disease in public health for cancer, including sustained proliferative signaling, evision of growth suppression, invasion and metastasis, replicative immortality, angiogenesis, resisting cell death, genome instability and mutation, tumor promoting inflammation, deregulation of cellular energetics and avoidance of immune destruction. Lectures will integrate the biology behind these hallmarks with strategies for the treatment and grewnition of cancer. Plance of the physical systems with chiraces the biology behind these hallmarks with strategies for the treatment and grewnition of cancer. Peer security of the physical systems with price and proving inflammation, described by a pr									
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pathogenesis, and pathophysiology, plus a review of the anatomy and physiology of selected major organ systems and associated diseases. Describe and identify public health problems with an undestanding of the dinical terminology, the underlying bloigical measurements. The problems of t				public health problems, focusing on risk factors,					
the anatomy and physiology of selected major organ systems and associated diseases. Describe and identify public health problems with an understanding of the clinical terminology, the underlying biological mechanisms, and the biological impact of disease in public health problems with an understanding of the clinical terminology, the underlying biological mechanisms, and the biological impact of disease in public health of cancer, including sustained proliferative signaling, evision of growth supports of, invasion and metastasis, reglicative immortality, angiogenesis, resisting cell death, genome instability and mutation, turnor promoting inflammation, deregulation of cellular energetics and avoidance of immune destruction. Lectures will integrate the biology behind these halfamsk with strategies for the treatment and provinced and reduced the publication of cancer. Pervironmental & Radiological Health Sciences (RHS 510 Dominety) and concerns of income of cancer and concerns of income of the publication of concerns of the publication of p									
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late radiation effects are elucidated. The impact of						İ			
time, dose, and fractionation on tumor control and		1				ĺ			
	Facility and the LO					İ			
Environmental & radiation effects are clarified and related to established		1				ĺ			
Radiological Health and newer treatment modalities, including	_					1			
Sciences ERHS 551B Radiation Oncology Principles combination therapies and emerging technologies. Yes Yes Yes Lecture(s), Guest speaker(s)	Sciences	ERHS 551B	Radiation Oncology Principles	combination therapies and emerging technologies.		Yes	Yes	Yes	Lecture(s),Guest speaker(s)

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			Application of a Health Impact Assessment approach to							
Environmental &			systematically judge the potential health effects of a							
Radiological Health			policy or project and the distribution of those effects							
Sciences	ERHS 560	Health Impact Assessment	within the population.		Yes		Yes			Lecture(s),Lab(s)
Environmental &			Design and implement an enidemialogic study from the							Lastura(s) Cuast anadyar(s) Assignments(s)/Craded
Radiological Health			Design and implement an epidemiologic study from the development of a research question and study design							Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or
_		Danier and Candrat of Bassach					.,			
Sciences	ERHS 573	Design and Conduct of Research	through data analysis and dissemination.				Yes			Unit,Discussion/Recitation
			Introduction to acquisition, organization, and analysis							
			of data relevant to environmental health. Data sources							
			covered include regulatory and low-cost ground-based							
			air sensors, remote sensing (satellite) products, climate							
			and weather model output, as well as data on water							
			quality, traffic and mobility, and housing and							
Environmental &			sociodemographics. Methodological topics covered							
Radiological Health		Geospatial Environmental	include geostatistical models, downscaling, predictive							Lecture(s),Assignments(s)/Graded
Sciences	ERHS 638	Health	modeling, and machine learning.		Yes		Yes		Yes	Deliverable(s),Readings/Video/Podcast,Lab(s)
Environmental &			Aspects of radiation public health for students in health							
Radiological Health			physics with emphasis on contemporary issues in							Lecture(s),Guest speaker(s),Assignments(s)/Graded
Sciences	ERHS 561	Radiation Public Health	radiation protection.	Yes			Yes			Deliverable(s)
Environmental &										
Radiological Health			Measurement and control of industrial or							Lecture(s), Assignments(s)/Graded Deliverable(s), Service
Sciences	ERHS 656	Occupational Noise Control	environmental noise emphasizing practical solutions.			Yes				Learning/Community Service
Environmental &			Environment, safety, and health management systems							
Radiological Health		Environement, Safety, Health,	for occupational health practitioners; major							Lecture(s),Assignments(s)/Graded Deliverable(s),Service
Sciences	ERHS 637	Management	environmental and DOT regulatory standards and laws.		Yes	Yes				Learning/Community Service
Environmental &										
Radiological Health		Occupational/Environmental	Toxic effects of harmful agents found in occupational							Lecture(s),Assignments(s)/Graded
Sciences	ERHS 504	Toxicology	and environmental settings.		Yes	Yes				Deliverable(s), Discussion/Recitation
			Investment analysis and decision making emphasizing							Other (please describe): An ESG investments module will be
Finance & Real Estate	FIN 655	Investments	equity securities and portfolio management		Yes		Yes		Yes	introduced in Fall of 2022.
		Advanced Portfolio	Portfolio management, asset allocation, and asset							
Finance & Real Estate	FIN 661	Management	selection theory and techniques.		Yes		Yes		Yes	Lecture(s),Discussion/Recitation
			Using futures, options, swaps, and securitized							
Finance & Real Estate	FIN 665	Derivative Securities Analysis	transactions in financial management.		Yes		Yes		Yes	Lecture(s),Discussion/Recitation
		Financing, Evaluating	Theoretical and applied approaches to the funding and							
Finance & Real Estate	FIN 669	Sustainable Enterprise	evaluation of enterprises.		Yes		Yes	Yes		
Fish, Wildlife &			Ecological effects of contaminants on populations,							
Conservation Biology	FW 544	Ecotoxicology	communities, and ecosystems.	Yes			Yes			
			Formal approaches to making management decisions							Lecture(s),Assignments(s)/Graded
Fish, Wildlife &			about wildlife and fish populations, using tools of							Deliverable(s),Readings/Video/Podcast,Lab(s),Discussion/Re
Conservation Biology	FW 553	Adaptive Management	decision analysis.	Yes			Yes		Yes	citation
		1	Current food safety issues from field to table;				ĺ		1	
Food Science & Human		1	microbiological, consumer, processing, and agricultural				ĺ		1	
Nutrition	FTEC 574	Current Issues in Food Safety	issues.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Discussion/Recitation
			Patterns of tree mortality and their consequences for							
			ecological communities, disturbance regimes, and							
			ecosystem processes. The literature included is diverse							
			ranging from ecophysiology to dendroecology to							
			climate science, and the goal is to integrate this diverse							
			literature to understand the ecological consequences							
Forest & Rangeland			of climate variability on forest ecosystems of the							
Stewardship	F 610	Advanced Forest Ecology	southern Rocky Mountains and globally.	Yes			Yes			
			Fire in forest and range ecosystems; principles and							Lecture(s),Assignments(s)/Graded
Forest & Rangeland		1	techniques for evaluating fire effects on vegetation,				ĺ		1	Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Stewardship	F 624	Fire Ecology	soils, watersheds, and wildlife.	Yes	<u> </u>		Yes	<u> </u>	<u> </u>	n

									Lecture(s),Guest speaker(s),Assignments(s)/Graded
Forest & Rangeland			Learn and practice a variety of skills needed to manage						Deliverable(s),Readings/Video/Podcast,Module or
Stewardship	NR 538	Skills in Ranch Management	western ranches through experiential learning.		Yes		Yes	Yes	Unit,Lab(s),Service Learning/Community Service
Stewarusnip	INK 336	Skills III Kalicii ivialiagement	western ranches through experiential learning.		res		res	res	Offic, Lab(s), Service Learning/Community Service
			Callabaration and an artist the artist and the arti						
5 105 1 1			Collaborative communication theories, methods and						
Forest & Rangeland			tools to effectively create change in the field of						
Stewardship	NR 543B	Conservation	conservation.		Yes	Yes			
Forest & Rangeland		Analysis of Environmental	Preparation and evaluation of environmental impact						
Stewardship	NR 567	Impacts	statements under NEPA.	Yes			Yes		
									Assignments(s)/Graded
Forest & Rangeland		Community-Based Natural	History, theory, practice, and evaluation of community-						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Stewardship	NR 625	Resource Management	based natural resource management.		Yes		Yes	Yes	n
									Lecture(s), Assignments(s)/Graded Deliverable(s), Module or
Forest & Rangeland			Measurement, analysis techniques for rangeland						Unit,Lab(s),Discussion/Recitation,Service
Stewardship	RS 532	Range Ecosystem Sampling	vegetation. Applications to management emphasized.		Yes			Yes	Learning/Community Service
			Geochemical techniques applied to the geology,						
			exploration, and environmental analysis of ore						
Geosciences	GEOL 547	Ore Deposit Geochemistry	deposits.		Yes				Lecture(s), Assignments(s)/Graded Deliverable(s)
		·							
			Groundwater modeling from a geologic perspective.						
			Conceptual models and computer modeling of						Lecture(s), Assignments(s)/Graded
Geosciences	GEOL 551	Groundwater Modeling	groundwater flow and solute transport.		Yes				Deliverable(s),Readings/Video/Podcast
			Current literature, new techniques, legislative and						Lecture(s),Guest speaker(s),Assignments(s)/Graded
			political developments in hydrogeology, and						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Geosciences	GEOL 552	Advanced Topics-Hydrogeology	appropriate case histories.		Yes		Yes	Yes	n
Geosciences	GLOL 332	Advanced Topics Trydrogeology	appropriate case mistories.		163		163	163	
			Introduction to the physics and specific applications of						
			common passive and active remote sensing techniques						
			to study the Earth system. Gain an understanding of						
			how to access, process, analyze and interpret remote						
			sensing observations to answer specific research						
Geosciences	GEOL 554	Remote Sensing of the Earth	questions focused on the Earth system.		Yes				Lecture(s),Assignments(s)/Graded Deliverable(s),Lab(s)
			Examination of the historical development of plate						
			tectonic theory and its application to understanding						
Geosciences	GEOL 570	Plate Tectonics	geological processes.		Yes			Yes	Lecture(s),Discussion/Recitation
			A survey of the structure of Earth's interior, with						
			emphasis on the processes that operate within Earth						
			and how those deep Earth processes interact with						
			geological processes that contribute to shaping our						
			planet's surface. Examination of the formation of early						
			Earth and the evolution of the planet to its modern						
Geosciences	GEOL 580A	The Earth's Interior	state.		Yes			Yes	Lecture(s), Discussion/Recitation
1					1				
	1		A survey of past climate and Earth system states, from	ĺ	ĺ			1	
ĺ		1	the Archean to the Holocene. Special emphasis on	ĺ	ĺ			I	
ĺ		1	extreme climates (pre-oxygenated atmosphere,	ĺ	ĺ			I	
ĺ		1	Snowball Earth, and super greenhouse climates),	ĺ	ĺ			I	
	1		Pleistocene glacial-interglacial cycles, and on time	ĺ	ĺ			1	
ĺ		1	periods where there remains substantial model-data	ĺ	ĺ			I	
			disagreement (early Eocene, Heinrich events). Role of	ĺ	ĺ			1	
		1	paleoclimate in understanding future warming and	ĺ	ĺ			I	
Geosciences	GEOL 590B	Paleoclimate	evolution of the Earth system.	ĺ	Yes			1	Lecture(s), Discussion/Recitation
Geosciences	GEUL 380B.	raicociillate	Geomorphology of channels, slopes, and drainage		163				Lecture(3),Discussion/ Necitation
Geosciences	CEOL CES	Eluvial Goomorphology	systems.		Voc				Lecture(s),Readings/Video/Podcast
Geosciences	GEOL 652	Fluvial Geomorphology	systems.		Yes				Lecture(s),Readings/video/PodCaSt

		T	1	1		1	1	1	T
			Field beard as a supplied and a second						
			Field-based geomorphologic analysis of landscape						
			forms and processes. Apply appropriate field						
			techniques to address relevant research hypotheses						
			related to advanced subject matter in geomorphology.						
			Analyze and interpret field-based data, orally present						
			findings in a symposium setting, and discuss and						Lecture(s),Other (please describe): Field trip to landslide
Geosciences	GEOL 662	Field Geomorphology	critically evaluate relevant literature.		Yes				hazard site
			Overview of the science of ecology; what questions are						Lecture(s),Guest
Graduate School	ECOL 505	Foundations of Ecology	asked, how they are answered.		Yes				speaker(s),Readings/Video/Podcast,Discussion/Recitation
			Current theories and tests of the dynamics and						
Graduate School	ECOL 600	Community Ecology	regulation of plant and animal communities.		Yes				Lecture(s),Readings/Video/Podcast,Discussion/Recitation
			Concepts, methods, issues in ecosystem science:						
			energy and matter cycling; systems perspectives,						Lecture(s),Guest speaker(s),Assignments(s)/Graded
Graduate School	ECOL 610	Ecosystem Ecology	simulation modeling, sustainability, global change.	Yes					Deliverable(s), Module or Unit, Discussion/Recitation
			gg						
		1	Develop the skills to participate effectively in graduate	ĺ					
		1	research and scholarly work (both orally and in writing)	ĺ					
		1	and learn how to successfully function in their	ĺ					
		1	respective academic discourse communities. Prepare	ĺ					Lecture(s),Assignments(s)/Graded
		Introduction to Craduata							
	CD 4 D 500	Introduction to Graduate	students for advanced courses that support them in						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Graduate School	GRAD 530	Research	research communications within their discipline.				Yes		n
			Continue the development of the skills to participate						
			effectively in graduate research and scholarly work						
			(both orally and in writing) and learn how to						
			successfully function in their respective academic						
			discourse communities. Preparation for advanced						Lecture(s), Assignments(s)/Graded
		Graduate Research	courses that support research communications within						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Graduate School	GRAD 540	Communication	disciplines.				Yes		n
Graduate School	GRAD 544	Ethical Conduct of Research	Principles and practice of ethical conduct of research.		Yes		Yes		Lecture(s),Readings/Video/Podcast,Discussion/Recitation
			Examines big data research through an applied						
			interdisciplinary approach to ethical issues surrounding						
			collection, use, reporting, and preservation of big data.						
			Incorporates a wide range of transferable skills training,						
			so students are well equipped to engage and lead data-						
Graduate School	GRAD 575	Big Data Ethics	centric research within or outside academia.		Yes		Yes		Lecture(s),Readings/Video/Podcast,Discussion/Recitation
			Develop the skills to effectively participate in graduate						,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			work (both orally and in writing) and learn how to	ĺ					Lecture(s),Guest speaker(s),Assignments(s)/Graded
		1	successfully function in academic discourse	ĺ					Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Graduate School	GRAD 5804	Graduate Research Skills	communities.	ĺ			Yes		n
2.344410 50.1001	3.0.15 300A	2.23ddc Nesedien skiis							
			Enhance the understanding of human physiology and						
			how the various physiological systems respond to						
			environmental stressors. Integrate previous knowledge						
			of human physiology and apply it to the physiological						
			response to heat stress, cold stress, hyperbaric						
		Environmental Exercise	atmosphere, hypobaric atmosphere, pollution, and						
Health & Exercise Science	HES 500	Physiology	sleep deprivation.		Yes	Yes			
		,							Lecture(s),Guest speaker(s),Assignments(s)/Graded
		1	Historiographical skills and methods; emphasis on	ĺ					Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
History	HIST 503	Historical Method-Preservation	theory and practice of historic preservation.	ĺ	Yes		Yes	Yes	n,Service Learning/Community Service
	51 505	Thistorical Michigan Frederical	Historiographical skills and methods; emphasis on				1.00	. 55	injustified additing/continuintly service
History	HIST 505	Digital History	theory and practice of digital history.		Yes				Assignments(s)/Graded Deliverable(s)
Thistory	11131 303	Digital History	theory and practice of digital history.		163				Lecture(s),Assignments(s)/Graded
1		1	Major works in the field of world environmental history	ĺ					Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
								1	rpenyerapietsi.neaunies/yiueu/Poutdst.pistussion/Recitatio I
History	HIST 539	World Environmental History	and the major historiographical debates.		Yes		Yes	Yes	n

								Assignments(s)/Graded
								Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
History	HIST 611	Research Seminar-United States	Research in United States history.	Yes		Yes	Yes	n
			Integration of family/couple therapy theories and					
Human Development &			practice related to treatment planning and internal					
Family Studies	HDFS 520	Family Therapy: Treatment Plan	family systems therapy.			Yes	Yes	Assignments(s)/Graded Deliverable(s)
Human Development &		Family Therapy: Common	Application of common factors - e.g., therapeutic					
Family Studies	HDFS 521	Factors	alliance - in family and couple therapy.			Yes	Yes	Assignments(s)/Graded Deliverable(s)
								Lecture(s), Assignments(s)/Graded
Human Development &								Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Family Studies	HDFS 534	Marriage and Family Therapy	Theories and techniques.			Yes	Yes	n
			Application of marriage and family therapy theories to					
Human Development &			clinical practice with a focus on addiction and self-of-					
Family Studies	HDFS 620	Family Therapy: Addictions	the-therapist.			Yes	Yes	Service Learning/Community Service
			Integration of family therapy theories and practice					
Human Development &			related to topics in sexuality, termination and referral,					
Family Studies	HDFS 621	Family Therapy: Topics-Sexuality	and one's personal theory of change.			Yes	Yes	Assignments(s)/Graded Deliverable(s)
•		, ,, ,,	, , ,					Lecture(s),Guest speaker(s),Assignments(s)/Graded
Human Development &			Ethical and legal issues in field of human development					Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Family Studies	HDFS 677	Ethical and Legal Issues	and family studies.			Yes	Yes	n
, ocaa.co	513077							Lecture(s),Guest speaker(s),Assignments(s)/Graded
Human Development &		Theories Applied Developmental	Theories of applied developmental science, and					Deliverable(s),Readings/Video/Podcast,Module or
Family Studies	HDFS 710	Science	implications for intervention and policy.			Yes	Yes	Unit, Discussion/Recitation
Talliny Studies	HDF3 /10	Science	Current issues in applied developmental science			res	res	Lecture(s),Assignments(s)/Graded
Human Development &		Seminar: Lifespan	involving a synthesis of theory, research, and					Deliverable(s),Readings/Video/Podcast,Module or
Family Studies	HDFS 792A	Socioemotional Development	application.			Ves		Unit, Discussion/Recitation
railily Studies	DDF3 /92A	30cioemotional Development	application.			Yes		Offit, Discussion/Recitation
			Factors influencing risk for poor developmental					
								1t(-) Ai(-)/C
			outcomes and resilience despite risks or adversities.					Lecture(s), Assignments(s)/Graded
			Risk and resilience are presented as developmental					Deliverable(s),Readings/Video/Podcast,Module or
Human Development &			processes influenced by ecological factors residing in					Unit, Discussion/Recitation, Service Learning/Community
Family Studies	HDFS 610	Risk and Resilience	families, schools, and neighborhoods.		Yes		Yes	Service
			Entrepreneurial skills and know-how to successfully					
			build an adventure tourism enterprise. As most					
			adventure tourism businesses are small-to-medium					
			enterprises, there is a need for students to understand					Lecture(s),Assignments(s)/Graded
Human Dimensions of			the fundamentals of how to develop an adventure					Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Natural Resources	NRRT 531	Adventure Tourism Enterprise	tourism concept and turn it into a successful business.	Yes		Yes	Yes	n
		1	Fundamental tourism theories and concepts that lay					
		1	the groundwork for understanding tourists and the			1		
			tourism industry. Based on the interdisciplinary nature					
		1	of tourism studies, covers the broad range of			1		
			fundamental theories and interrelated concepts that					
		1	guide decision-making in the tourism industry. Focuses					
		1	on several key themes aimed to capture the primary					Lecture(s),Guest speaker(s),Assignments(s)/Graded
Human Dimensions of		1	areas of conceptual thinking and analysis in			1		Deliverable(s),Readings/Video/Podcast,Module or
Natural Resources	NRRT 600	Tourism Practices	contemporary tourism.	Yes		Yes	Yes	Unit,Discussion/Recitation
			Managerial communication skills and negotiation tools					
			and their implications for effective organizational					
Human Dimensions of			communication and management of potential conflicts					Lecture(s),Guest speaker(s),Assignments(s)/Graded
Natural Resources	NRRT 625	Tourism and Conflict	faced by managers in the tourism industry.	Yes		Yes	Yes	Deliverable(s),Readings/Video/Podcast,Module or Unit
Human Dimensions of			, -υ					Lecture(s),Guest speaker(s),Assignments(s)/Graded
Natural Resources	NRRT 679A	Current Topics: Tourism	Current topics in nature-based travel and tourism.	Yes		Yes	Yes	Deliverable(s), Service Learning/Community Service
			Examination of theoretical and empirical studies					Christian Office Control
Journalism & Media		Communicating Science &	concerning communication of science and technology					
Communications	JTC 662	Technology	subject matter.	Yes		Yes		Lecture(s),Readings/Video/Podcast,Module or Unit
								, , , , , , , , , , , , , , , , , , ,

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Languages, Literatures, &		Advanced Author Studies-	Critical approaches to the study of selected authors						
Cultures	LSPA 553	Spanish	through appreciation and analysis of their major works.				Yes		Lecture(s),Assignments(s)/Graded Deliverable(s)
Languages, Literatures, &	LSFA 333	Spanish	Selected topics (theme, topoi, and interdisciplinary				ies		Ecctare(3),Assignments(3), Graded Deliverable(3)
Cultures	LSPA 554	Advanced Topic Studies-Spanish					Yes		Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Cultures	25171551	Advanced ropic scales spanish	subjects, in Spanish necracare.				100		zeeta e(s),neaamgs, viaco, vaaastis isaasiis ii, neatation
			This course teaches the development and management						
		Supply Chain Development and	of the global supply chain that plans, sources, makes						Lecture(s),Guest speaker(s),Assignments(s)/Graded
Management	MGT 665	Management	and delivers an organization's products.		Yes		Yes	Yes	Deliverable(s),Readings/Video/Podcast,Module or Unit
Management		Management	and delivers an organization's products.		163		100	1.03	Serverable(s),ricadings, viacof i oddast,riodale or offic
			Linear and nonlinear systems, orbits, phase space,						
			flows of vector fields, stability, bifurcation theory,						
Mathematics	MATH 540	Dynamical Systems	chaos, strange attractors and applications.				Yes	Yes	Guest speaker(s), Discussion/Recitation
		,	Advanced study experiences which deal with						
Mathematics	MATH 676	Topics in Mathematics	established content areas in mathematics.		Yes				Guest speaker(s)
		·							
			Explore orbital elements, motion, and analyses.						
			Investigate the design and characteristics of the						
			common orbit regimes, and focus on orbital maneuver						
			options and design. Emphasis on developing technical						
			analytical capabilities, engineering judgement, and						
Mechanical Engineering	MECH 580B	Orbital Mechanics	intuitive understanding of orbital maneuvers.		Yes				Lecture(s),Readings/Video/Podcast
			_						
			Overview of orbital mechanics theory, elements, and						
			orbit regimes. Investigate trajectory modeling physics						
			and philosophy, and then implement the theories to						
			create and optimize trajectories to six orbits over the						
			course of the semester (LEO, GTO, Sun Synch, Molniya,						
			GEO, and Interplanetary). Perform launch vehicle						
			conceptual design and sizing, optimal staging, and						
Mechanical Engineering	MECH 580B	Trajectory and Performance	definition of margins and prediction of mission losses.		Yes				Lecture(s),Readings/Video/Podcast
			Technology review and application of engineering						
			sciences and economics to the analysis and design of						
			vapor power generation systems. Vapor power cycles,						
			steam generation, and auxiliary systems associated						
			with power plants. Overall design of power plants as						
			well as component design. Fossil fuel and nuclear						
Mechanical Engineering	MECH 505	Steam Power Plants	energy systems are considered.	Yes		Yes			
			Solar radiation, flat-plate collectors, energy storage,						
			space heating and cooling, power generation,						
Mechanical Engineering	MECH 575	Solar and Alternative Energies	applications, simulation.	Yes				Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
									Lecture(s),Assignments(s)/Graded
			Appropriate techniques for analyzing music from the						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Music, Theatre & Dance	MU 518	Post-Tonal Analytic Techniques	late 19th century, 20th century, and 21st century.		Yes		Yes		n
			Decembe to shair use used in acceptable and		1				
			Research techniques used in quantitative and		ĺ				
Music Thank 0.5		Research Methods/Music	qualitative methods. Introductory methods used in		ĺ		V		Lastona (a) Bandina a h Galan (B. L. 1931 11 12 11 11 11
Music, Theatre & Dance	MU 543	Therapy	music therapy and music education research.				Yes	Yes	Lecture(s),Readings/Video/Podcast,Discussion/Recitation
			Coare reading and analysis propagation of instrumental						
		Advanced Instrumental	Score reading and analysis, preparation of instrumental						Assignments(s)/Craded
Music Theatra 9 Dans	MALLESC	Advanced Instrumental	scores for performance; expressive baton techniques,				Ves		Assignments(s)/Graded
Music, Theatre & Dance	MU 556	Conducting & Technology	rehearsal methods and procedures.				Yes		Deliverable(s),Readings/Video/Podcast Lecture(s),Assignments(s)/Graded
		1	Historical and esigntific foundations of nover-last-	I	ĺ				
Music Theatra 9 Dans	NALL CAS	Nourossiones and Music	Historical and scientific foundations of neurologic music	1	1		Vas		Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Music, Theatre & Dance	MU 648	Neuroscience and Music	therapy.				Yes		n Assignments(s)/Graded
		Advanced Practice in Music							Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Music, Theatre & Dance	MU 649	Advanced Practice in Music Therapy	Study of advanced music therapy techniques.				Yes	Vac	n
widdle, fficatie & Dance	1910 049	тистару	or advanced music therapy techniques.				1163	res	ii

	1					I			
			Demonstration of graduate-level applied musical						
Music, Theatre & Dance	MU 671	Graduate Recital	proficiency through public performance.				Yes		Assignments(s)/Graded Deliverable(s),Lab(s)
wasie, meatre & bance	1010 071	Graduate Neetal	proficercy through public performance.				163		Assignments(s)/Graded
			Major topics in contemporary theories of normative						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Philosphy	PHIL 548	Normative Ethical Theory	ethics.		Yes		Yes		n
	11112310	,			100		1.03		
		Seminar - Environmental	Aesthetic appreciation of nature, duties concerning						
Philosphy	PHIL 565	Philosophy	fauna, flora, endangered species, ecosystem.		Yes		Yes	Yes	Discussion/Recitation
		, , ,	Selected primary source materials on behavior of					1.50	Lecture(s),Assignments(s)/Graded Deliverable(s),Service
Politcal Science	POLS 501	Citizen Politics in the U.S.	individuals and groups in American politics.		Yes		Yes	Yes	Learning/Community Service
			Graduate survey of the scope of the Political Science						, , , , , , , , , , , , , , , , , , ,
		Scope and Methods of Political	discipline and the range of research designs and						
Politcal Science	POLS 624	Science	methods used in the discipline.		Yes		Yes	Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
		Quantitative Methods-Political	Quantitative approaches and methods for the study of						Lecture(s),Assignments(s)/Graded
Politcal Science	POLS 625	Research	political life.		Yes		Yes	Yes	Deliverable(s), Discussion/Recitation
Politcal Science	POLS 660	Theories of the Policy Process	Recent developments in public policy.		Yes		Yes	Yes	Readings/Video/Podcast, Discussion/Recitation
			The practice of policy analysis and the tools used to						Lecture(s), Guest speaker(s), Assignments(s)/Graded
			conduct an analysis including: forecasting, cost benefit						Deliverable(s), Discussion/Recitation, Service
Politcal Science	POLS 665	Public Policy Analysis	analysis, cost effectiveness analysis, and policy design.		Yes		Yes	Yes	Learning/Community Service
			Examines research related to the key themes of power,						
			development, democracy, inequality, justice,						
			labor/work, and social transformation. Analyze themes						Lecture(s),Assignments(s)/Graded
			through a variety of theoretical literatures and practical						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Politcal Science	POLS 672	Power Justice and Democracy	examples.		Yes		Yes	Yes	n
		·							Lecture(s),Assignments(s)/Graded
			Political thought applied to questions of the						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Politcal Science	POLS 729	Political Theory & Environment	environment.		Yes		Yes	Yes	n
		Comparative Environmental	Application of comparative political theory to analysis						Lecture(s),Assignments(s)/Graded
Politcal Science	POLS 749	Politics	of environmental politics.		Yes				Deliverable(s),Readings/Video/Podcast
			Selected primary materials on governmental						Lecture(s), Guest speaker(s), Assignments(s)/Graded
			performance, groups, and mass public in American						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Politcal Science	POLS 709	Environmental Politics in U.S.	environmental politics.	Yes			Yes	Yes	n
			·						
			Science, skills, and beliefs directed at the maintenance						
Psychology	PSY 517	Perspectives in Global Health	and improvement of health for all people.			Yes			
			Outline of major empirically validated approaches to						
			assessment and treatment including cognitive-						
Psychology	PSY 722	Empirically Validated Therapies	behavioral therapies, interpersonal therapy.				Yes	Yes	Lecture(s), Discussion/Recitation
		·							
			Diversity issues in clients and counselors such as	ĺ					
			gender, race, age, sexual orientation, education,	ĺ					
Psychology	PSY 775	Diversity Issues in Counseling	religion, disability, socioeconomic status.			Yes			
			Therapies used to treat individuals with substance use						
		Introduction to Addiction	disorders, with an emphasis on empirically supported						
Psychology	PSY 612	Counseling	treatments.		Yes				
			Construction, administration, interpretation of						
		Psychology Measurement-	objectional measures of personality including	ĺ					
Psychology	PSY 670	Personality	aptitudes, abilities, interests.		Yes				
			Motivational interviewing in the treatment of						
Psychology	PSY 724	Motivational Interviewing	individuals with substance use disorders.		Yes				
			Philosophical foundations, a description of program						
			service areas, adult participation trends, and current	ĺ					
School of Education	EDAE 520	Adult Education	issues.	<u> </u>			Yes	Yes	Readings/Video/Podcast, Discussion/Recitation
									Assignments(s)/Graded
			Using theory and best practices to design and deliver						Deliverable(s),Readings/Video/Podcast,Module or
School of Education	EDAE 624	Adult Teaching & Learning I	instruction for adults.				Yes	Yes	Unit,Discussion/Recitation

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			Consequent life at the studies that are side as							Lasting (a) Count on a long(a) And improve the long of a dead
		Course and Freedom and	Career and lifestyle studies that provide an							Lecture(s), Guest speaker(s), Assignments(s)/Graded
Cohool of Education	FD.CO F00	Career and Employment	understanding of career development, employment				v			Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
School of Education	EDCO 500	Concepts	concepts, and career counseling resources.				Yes			Lecture(s),Assignments(s)/Graded
			Career development programs and processes over the							Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
School of Education	EDCO 660	Career Development Counseling	life span with particular attention to career choice.				Yes			n
School of Education	EDCO 000	Career Development Counseling	ine span with particular attention to career choice.				165			
			Career and life design counseling knowledge, skills, and							
			practices with a focus on emerging career development							
			and career counseling theories, concepts, and models;							Lecture(s),Assignments(s)/Graded
			career programming and evaluation; and career							Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
School of Education	EDCO 661	Career and Life Design	development and counseling advocacy.				Yes			n,Service Learning/Community Service
School of Education	LDC0 001	eareer and Eire Besign	development and counseling davocacy.				163			injustivite Ecurining/Community Service
			Current issues related to employment, employee							
			development, career planning, and labor market							
			information are examined. Site visits and career							
			development audits of local employers as well as other							
			structured activities and assignments encourage							Guest speaker(s), Assignments(s)/Graded
			students to consider educational and labor market							Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
School of Education	EDCO 665	Career Development Institute	trends and career development within a global society.				Yes		Yes	n
							1.00			
			Provide educators with knowledge and skills to plan							Assignments(s)/Graded
			and implement school-based research to improve							Deliverable(s),Readings/Video/Podcast,Lab(s),Discussion/Re
School of Education	EDRM 602	Action Research	teaching and learning.				Yes			citation, Service Learning/Community Service
			g g							, , , , , , , , , , , , , , , , , , , ,
		Principles: Quantitative Data	Quantitative data analysis in social science research;							Lecture(s),Readings/Video/Podcast,Module or
School of Education	EDRM 606	Analysis	descriptive statistics; fundamentals of inference.				Yes			Unit,Discussion/Recitation
		,	,							,
			Introduces basic autoethnographic research skills that							
			underpin the creation of the culminating SAHE program							
			portfolio. Foundational research methods, the portfolio							
			process, cultivating reflective practice, and critical							Lecture(s),Guest speaker(s),Assignments(s)/Graded
			analysis skills are necessary to both conduct							Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
School of Education	EDRM 663	Reflective Practice I	autoethnography and develop as a practitioner-scholar.				Yes			n
										Assignments(s)/Graded
			Examination of qualitative research theory, methods,							Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
School of Education	EDRM 704	Qualitative Research	and applications to education and the social sciences.				Yes			n
			The clinical mental health counseling (CMHC) field and							
			counseling treatment, with a focus on emerging							
			current trends, multicultural considerations,							
			professional issues, and credentialing of CMHCs. Topics							
			include clinical interviewing, case conceptualizations,							
School of Education	EDCO 675	Mental Health Counseling	and treatment and diagnosis of specialty populations.		Yes					
			Theoretical underpinnings, research design, ethics and							
			practical application of ethnographic research in a							
School of Education	EDRM 711	Ethnographic Research	naturalistic setting.			Yes				
			Special concerns for working with people of various							
		Multicultural & Special	cultural, ethnic, exceptional, and special interest							
School of Education	EDUC 651	Populations	groups.			Yes				
School of Occupational			Critically evaluate qualitative and quantitative research							
Therapy	OT 620	Research to Practice I	processes pertaining to individuals.				Yes			Assignments(s)/Graded Deliverable(s),Lab(s)
			Optimizing occupational performance for adults and							
School of Occupational			older adults with attention to roles, satisfaction,							
Therapy	OT 636	Adult/Old Age I Lab	competence, and activities.				Yes			Lecture(s),Lab(s),Discussion/Recitation
School of Occupational			Critically evaluate qualitative and quantitative research							
Therapy	OT 640	Research to Practice II	processes pertaining to groups and systems.				Yes			Lab(s), Discussion/Recitation

School of Social Work School of Social Work
School of Social Work SOWK 520 Advocacy Developing anti-oppressive practice with a focus on multiculturalism and social justice advocacy. Critically evaluate personal traits, stutides and values regarding diversity and identity formation while exploring theoretical frameworks for understanding oppression. Analyze the relationships among power, privilege and oppression. Analyze the relationships among power, privilege and oppression. Analyze the relationships among power, privilege and oppression. Analyze the relationships among power, privilege and oppression. Analyze the relationships among power, privilege and oppression. Analyze the relationships among power, privilege and oppression. Analyze the relationships among power, privilege and oppression. Analyze the relationships among power, privilege and oppression. Acquiring strategies for combating injustice. School of Social Work SOWK 530 Advance Practice School of Social Work SOWK 530 Advance Practice Individuals using an advanced generalst practice approach. Foundations - Theoretical Sociology SOC 502 Sociology SOC 502 Sociology SOC 503 Sociology SOC 504 Food Systems and Agriculture Advances in study of organization and function of nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and organellar genomes, gene expression in Nuclear and
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Sociology SOC 503 Contemporary Sociologic Theory 20th century. Yes
Theory and research on class structure, status
Sociology SOC 630 Social Stratification attainment, ideology, and social change.
Bayesian analysis of statistical models, prior and
posterior distributions, computing methods, Lecture(s),Assignments(s)/Graded
Statistics STAA 575 Applied Bayesian Statistics interpretation. Yes Not Covered Deliverable(s), Discussion/Recitation
Introduction to multiple regression and data analysis Lecture(s),Assignments(s)/Graded
Statistics STAT 540 Data Analysis and Regression with emphasis on graphics and computing. Yes Not Covered Deliverable(s), Discussion/Recitation
Applications of statistics in environmental pollution
Statistics for Environmental studies involving air, water, or soil monitoring;
Statistics STAT 547 Monitoring sampling designs; trend analysis; censored data.
Optimization and integration in statistics; Monte Carlo
methods; simulation; bootstrapping; density
Statistics STAT 600 Statistical Computing estimation; smoothing. Yes Not Covered Not Covered Deliverable(s), Discussion/Recitation
Model estimation and goodness of fit for linear models;
confidence intervals for prediction and estimation; lack
of fit, model diagnostics, transformations, model
selection, influential observations, collinearity,
interaction, polynomial regression, regression with Lecture(s),Assignments(s)/Graded
Statistics STAR 513 Regression Models for Research dummy variables, weighted least squares, imputation. Yes Deliverable(s), Discussion/Recitation
Categorical data analysis, estimation and testing for
contingency tables, introduction to generalized linear
models, logit and probit models for binary regression,
extensions to nominal and ordinal multicategory
response, count data, Poisson and negative binomial
Statistics STAR 531 Generalized Regression regression, log-linear models. Yes Assignments(s)/Graded Deliverable(s), Discussion/Recitation
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Overview of statistics theory use in agriculture
Overview of statistics theory; use in agriculture,
Overview of statistics theory; use in agriculture, business, environment, engineering; modeling; Statistics STAT 501 Statistical Science computing; statisticians as researchers/consultants. Yes

			Basic orientation to food animal production units, herd						
		Food Animal Production & Food	health concepts, and issues of food safety from						Lecture(s), Guest speaker(s), Assignments(s)/Graded
Vetrinary Health System	VM 648	Safety	preharvest through processing and distribution.		Yes		Yes	Yes	Deliverable(s)
									Lecture(s), Guest speaker(s), Assignments(s)/Graded
			Important topics in veterinary medicine and public						Deliverable(s),Readings/Video/Podcast,Discussion/Recitatio
Vetrinary Health System	VM 707	Issues in Animal Health	health.	Yes			Yes	Yes	n,Service Learning/Community Service
			Principles of health promotion and disease prevention						
Vetrinary Health System	VM 714	Veterinary Preventive Medicine	in populations.		Yes		Yes	Yes	Lecture(s)
			Introduces the principles of veterinary shelter						
			medicine. Emphasis on management of small animals						Lecture(s),Guest
Vetrinary Health System	VM 716	Shelter Veterinary Medicine	with herd health concepts.				Yes		speaker(s),Readings/Video/Podcast,Discussion/Recitation
			Health management, and diagnosis and treatment of						
Vetrinary Health System	VM 757	Bovine Herd Medicine	diseases of food animals.					Yes	Lecture(s)
			Conduct of responsible research, contributions of						
		Vetrinary Science: Research and	research to the practice of veterinary medicine, and						
Vetrinary Health System	VM 603	Methods	career opportunities.	Yes		Yes			