



## **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 Sustainability-Focused Courses										
Department	Course #	Course Name	Course Description	Environmental Focused	Environmental Inclusive	Social Focused	Social Inclusive	Economic Focused	Economic Inclusive	How Sustainability Concepts are Integrated
Ecosystem Science & Sustainability	ESS 312	Sustainability Science	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, and stage interventions to achieve more sustainable behaviors and practices.	Yes		Yes		Yes		Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or 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.	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 & Sustainability	ESS 405	Global Agriculture and Environmental Change	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 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 & Sustainability	ESS 486	Ecosystem Practicum	One-week field practicum to examine ecosystem science and sustainability issues in Colorado landscapes.	Yes		Yes				
School of Global Environmental Sustainability	GES 101	Foundations of Environmental Sustainability	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		
School of Global Environmental Sustainability	GES 141	Introduction to Sustainable Energy	Fossil, nuclear, and renewable energy sources. Energy conversion, distribution, and storage. Energy and the environment. Energy economics and policy.	Yes			Yes	Yes		
School of Global Environmental Sustainability	GES 330A	Sustainability in Practice - Project	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, Other (please describe): Independent project

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
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
School of Global Environmental Sustainability	GES 441	Analysis of Sustainable Energy Solutions	Methods of evaluating sustainable energy technologies, including life cycle assessment, energy return on investment, 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				
School of Global Environmental Sustainability	GES 460	Law & Sustainability	Introduction to the domestic and international laws that influence and interact with the implementation of sustainability in the U.S. and abroad.		Yes	Yes		Yes		
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 electronics--from 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 Sustainability	GES 470	Applications of Environmental Sustainability	Integration of the dimensions of global environmental sustainability--environment, society, and economy--through case studies and team project.	Yes		Yes		Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or 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
Agricultural & Resource Economics	AREC 202	Agricultural and Resource Economics	Introduction to decision-making by consumers, firms, and government and the resulting allocation of resources through markets.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s)
Agricultural & Resource Economics	AREC 222	Economics of Food Systems	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		
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

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

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

Construction Management	CON 476	Sustainable Design and Construction	Major components of sustainable design/construction: energy, healthy buildings, cultural, natural resources, use, other environment/economic issues.	Yes			Yes	Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Construction Management	CON 477	Residential Aging-In-Place and Green Building	Aging-in-place and green building aspects of the residential construction market.		Yes	Yes		Yes		
Design & Merchandising	AM 330	Global Sourcing of Textiles and Apparel	Structure of textiles and apparel industry; global sourcing, production, distribution and consumption of textile and apparel products. Implications for sustainability in the textiles and apparel industry.		Yes	Yes		Yes		
Design Thinking	IDEA 310F	Foundations of Textile Design	Employ design thinking theories and methods to textile projects that promote "iterative tinkering" through exploration of various design processes in a maker space setting.	Yes		Yes		Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Lab(s),Discussion/Recitation,Other (please describe): Sustainable textile design and materials research. Community engagement and collaborative design thinking projects with an emphasis on circular economies
Economics	ECON 101	Economics of Social Issues	Economic analysis of poverty, crime, education, and/or other social issues. Basics of micro, macro, and political economy.			Yes		Yes		
Economics	ECON 211	Gender in the Economy	Role gender plays in economies; the way gender affects economic outcomes for individuals and societies.			Yes		Yes		
Economics	ECON 212	Racial Inequality and Discrimination	Economic inequality based on race or ethnicity in the United States. Economic debates about sources, consequences, and remedies.			Yes		Yes		
Economics	ECON 240	Issues-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
Economics	ECON 340	Introduction -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
Economics	ECON 346	Economics of Outdoor Recreation	Application of benefit-cost framework to public planning for outdoor recreation. Topics include non-market valuation, projecting demand, cost of supplying recreation, and regional economic development.	Yes			Yes	Yes		Lecture(s),Assignments(s)/Graded Deliverable(s),Module or Unit
Economics	ECON 444	Economics of Energy Resources	Supply, consumption trends, and projected demand for alternative energy resources in domestic and world perspective; economics of public energy policies.	Yes			Yes	Yes		
English	CO 301B	Writing in the Disciplines: Sciences	Learning writing strategies for addressing general audiences in sciences.	Yes		Yes				Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
English	E 465	Topics-Literature and Language	Selected issues in literature and language.	Yes		Yes			Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Environmental & Radiological Health Sciences	ERHS 220	Environmental Health	Impact of people on the physical and biological environment as well as impact of the environment on people; emphasis placed on human health.	Yes		Yes				
Ethnic Studies	ETST 100	Introduction to Ethnic Studies	Key concepts, theories, and historical experiences that form the basis of scholarly work in comparative ethnic studies, domestically and internationally.		Yes	Yes		Yes		Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Ethnic Studies	ETST 260	Contemporary Indigenous Issues	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, cultural resources, religious freedom, the environment, and activism.		Yes	Yes		Yes		
Ethnic Studies	ETST 365	Global Environmental Justice Movements	How the world's poor and minorities self-empower to challenge institutional racism and government apathy in order to secure basic environmental goods.	Yes		Yes			Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation

Ethnic Studies	ETST 381A3	Horror Films, Race and Women	The term 'gynae horror' 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 deep-rooted, 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			Yes	
Forest & Rangeland Stewardship	F 325	Silviculture	Principles of silviculture and the application to ecologically-based management and restoration of forests ecosystems.	Yes			Yes	
Forest & Rangeland Stewardship	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.	Yes			Yes	
Forest & Rangeland Stewardship	F 466	Urban and Community Forestry	Policies and management of publicly and privately owned 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			



Forest & Rangeland Stewardship	RS 300	Rangeland Conservation & Stewardship	Conservation and management of rangeland-ecosystem values using sustainable practices.						
Geosciences	GEOL 380A1	Critical Zone Science	Focus on the Earth's terrestrial near-surface environment that sustains most non-marine life on the planet, known as the Critical Zone. Gain experience with the architecture and geologic and geomorphologic context of the Critical Zone in different environments. Explore the interactions between the solid earth, atmosphere, hydrosphere and biosphere that give rise to the Critical Zone, and learn how the Critical Zone modulates various Earth surface processes.	Yes			Yes	Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Module or Unit,Discussion/Recitation
History	HIST 255	Native American History	History of Native American peoples in the United States to the present, including origin stories.	Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
History	HIST 470	World Environmental History	World environmental history since 1500, emphasizing the dynamic interaction of nature, culture, and human activity.	Yes		Yes		Yes	
History	HIST 481A6	History of Outdoor Recreation	Over 200 million Americans participate in some form of outdoor recreation. Outdoor recreation has come to define many American's understandings of nature, identity, and leisure. Explore the history of outdoor recreation in the United States, tracing its global roots, its production and management by governmental agencies (from local to federal), controversies surrounding various forms of recreation, and its role in defining American identity.	Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Honors Program	HONR 192	Honors First Year Seminar	Humanistic and scientific studies; emphasis on literate activities, written communication; student development and transition to university life. Topics vary by instructor, recent sustainability related or focused courses: North American Empires; The American West: History and Myth; The Power of Community: Understanding Human Sustainability; How Wildlife Influences Human Society; Leisure in Your Life - A Look at Leisure, Recreation, and Work in Contemporary Society; and "You Are What You Eat" - Food in Our Everyday Life.	Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Honors Program	HONR 193	Honors Seminar	Humanistic and scientific studies with emphasis on rigorous literate activities, especially written communication. Topics vary by Instructor but include: Saving Earth's Biodiversity from Ourselves Through Ethics, Policy and Personal Action; Climate Change Leadership: Exploring Mind-Bending Solutions; Got Affluenza? Consumerism and the Environment; Issues in International Travel and Tourism: The Global to Local Nexus; and Diversity and Social Justice.	Yes			Yes	Yes	Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Honors Program	HONR 292C	Honors -Across Cultures	Identities, social contexts, global relations, and knowledge systems. Ways of knowing across cultures. Topics vary but include: Refugees in a Global Era; Wildlife Conservation Issues.	Yes		Yes		Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Honors Program	HONR 392	Honors Seminar	Various topics in humanistic and scientific studies. Topics include: Philanthropy in Action: Passion to Serve; Tikkun Olam; Self In/Of Landscape: Expanding the Field of Ecopoetry; Myth Busters: Science, Pseudoscience, and Just Plain Nonsense.	Yes		Yes		Yes	Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service
Horticulture & Landscape Architecture	HORT 410	Postharvest Biology and Technology	Storage and quality maintenance of harvested fruits and vegetables.	Yes		Yes		Yes	Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Human Development & Family Studies	HDFS 434	Risk and Resilience Across the Lifespan	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, schools, neighborhoods.	Yes		Yes		Yes	
Human Dimensions of Natural Resources	NRRT 231	Principles - Parks/Protected Area Management	Provide a broad but comprehensive understanding of the history, challenges, and practices of parks and protected areas management.	Yes		Yes		Yes	

Human Dimensions of Natural Resources	NRRT 320	International Issues - Recreation & Tourism	History, development, and preservation of international parks, preserves, tourist and historical sites.	Yes		Yes			Yes	
Human Dimensions of Natural Resources	NRRT 330	Social Aspects of Natural Resource Management	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 social science approaches and theoretical frameworks to their natural resource applications.	Yes		Yes		Yes		Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Human Dimensions of Natural Resources	NRRT 340	Principles in Conservation Planning and Management	Social, economic, legal, and ecological concepts that shape planning and management frameworks within conservation.	Yes		Yes		Yes		
Human Dimensions of Natural Resources	NRRT 400	Environmental Governance	Theory and practice of prevalent environmental governance approaches in diverse social and environmental contexts.	Yes		Yes		Yes		
Human Dimensions of Natural Resources	NRRT 402	Cultural and Political Ecology	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 between society and nature, and natural resource management, access and control.	Yes		Yes			Yes	
Human Dimensions of Natural Resources	NRRT 470	Tourism Impacts	Examine the impacts of tourism from several distinct, but interrelated perspectives: social, political, economical, environmental, and technological. Limits to future tourism growth are discussed and possible strategies to mitigate impacts are detailed. Case studies are used to highlight issues discussed.	Yes		Yes		Yes		
Human Dimensions of Natural Resources	NRRT 475	Leadership for Conservation	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-awareness, exploring leadership strategies, and systems-thinking, skills are gained to make a difference in socio-ecological systems.	Yes		Yes		Yes		Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
International Education	IE 479	International Development	Contemporary issues in international community and economic development with practical and theoretical analysis from interdisciplinary perspectives.	Yes		Yes		Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit
Management	MGT 360	Social & Sustainable Venturing	Entrepreneurship and economic opportunities in the transition to a socially and ecologically sustainable global economy.	Yes		Yes		Yes		Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service
Management	MGT 435	Global Ethical Leadership & Stakeholder Management	Develop knowledge and competence in global ethical leadership and stakeholder relationships in a global economy.		Yes	Yes		Yes		
Materials Science & Engineering	MSE 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 electronics--from 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
Mechanical Engineering	MECH 436	Green Engineering - Materials & Environment	Principles of green engineering in the context of materials, human dependence on materials, and the environmental consequences of materials selection. Perspective, background, methods, and data for evaluating and designing with materials to minimize the environmental impact.	Yes		Yes				

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

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

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

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
Agricultural & Resource Economics	AREC 478	Agricultural Policy	Formulation, evaluation, and administration of public policies affecting the agricultural and natural resource industries in the United States.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Agricultural & Resource Economics	AREC 454	Real Estate Appraisal	Theoretical principles that underlie real estate appraisal methods. Procedures and practices used in real estate appraisal.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Other (please describe): field trip
Agricultural Biology	AB 270	Agricultural Biology -Transfer Orientation	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 professionals by designing resumes and practicing skills to succeed in a professional environment.		Yes		Yes			
Agricultural Biology	AB 130	Agricultural Biology Data	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 report, and oral presentation.		Yes		Yes			
Agricultural Biology	AB 330	Applications in Agricultural Biology I	Knowledge, skills, and abilities to propose sustainable solutions to biological problems in natural or managed ecosystems. Collectively discuss a diverse set of case studies that incorporate systems approach in solving agricultural biology issues. Hone career plans and professional skills.	Yes			Yes			
Agricultural Biology	BSPM 361	Elements of Plant Pathology	Diseases of economic plants.	Yes				Yes		
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	BSPM 450	Molecular Plant-Microbe Interaction	Principles of plant-microbe/insect interactions, physiological and molecular aspects of plant defense, genomics approaches to study plant defense.		Yes					Lecture(s),Assignments(s)/Graded Deliverable(s)
Animal Sciences	ANEQ 448	Livestock Manure Management and Environment	Manure management; maximizing benefits to soils and crops; minimizing air and water quality hazards; complying with regulations.	Yes			Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Lab(s),Discussion/Recitation
Animal Sciences	ANEQ 320	Principles of Animal Nutrition	Understanding of nutrients and nutrient function required to support animal life through all physiological states.		Yes		Yes		Yes	Lecture(s),Discussion/Recitation
Animal Sciences	ANEQ 300V	Seedstock Sale Management	Planning and executing a purebred livestock sale.				Yes		Yes	
Animal Sciences	ANEQ 300U	Topics: Seedstock Sale Management	Plan and promote a purebred livestock sale.				Yes		Yes	
Animal Sciences	ANEQ 300N	Topics:Seedstock Merchandising	Overview of beef seedstock industry, including selection, management, and marketing of livestock.		Yes				Yes	

Anthropology & Geography	ANTH 317	Anthropology of Human Rights	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 migration, indigenous communities, women and children, health, religious practices, among others.		Yes	Yes			Yes	
Anthropology & Geography	ANTH 336	Art and Culture	Art expression is a defining factor in cultural identity and representation in a modern world where geographical and political borders are diminishing.				Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Other (please describe): museum tours
Anthropology & Geography	GR 320	Cultural Geography	Geographic analysis of cultural phenomena, elements emphasizing human-land relationships and spatial patterns of agriculture, cities, language, religion.		Yes	Yes			Yes	
Anthropology & Geography	ANTH 200	Cultures and the Global System	Analyze diversity of smaller-scale societies, and cultural responses and adaptations to emerging global trends.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit
Anthropology & Geography	ANTH 478	Heritage Resource Management	Cultural resource laws and policy; practices commonly employed in management and preservation of these diverse resources.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation,Service Learning/Community Service
Anthropology & Geography	ANTH 400	History of Theory - Anthropology and Geography	Anthropological/Geographical theory from its beginnings with Aristotle through recent developments into the 20th century.		Yes		Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit
Anthropology & Geography	ANTH 274	Human Diversity	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 health impacts.		Yes	Yes			Yes	
Anthropology & Geography	ANTH 330	Human Ecology	Roles of technology, economics, social organization, and ideology in human adaptations to and survival in natural and cultural environments.		Yes	Yes				Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Anthropology & Geography	ANTH 412	Indians of North America	Native American peoples, their cultural variation across the continent, and cultural encounters with colonial expansion.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Other (please describe): museum tours
Anthropology & Geography	ANTH 100	Introduction Cultural Anthropology	Human societies and their cultural setting; variation in beliefs, social customs, and technologies; human differences in anthropological terms.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Module or Unit,Discussion/Recitation
Anthropology & Geography	GR 100	Introduction to Geography	Major geographic themes applied to selected regions; physical environment, human-land relationships, regional analysis.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Art & Art History	ART 455	Advanced Typography/Design Systems	Two- and three-dimensional solutions for advertising, corporate identity, packaging, and publication design.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation

Art & Art History	ART 456	Advanced Illustration	Projects in editorial and reportorial illustration emphasizing techniques applied to solving problems in advanced composition. Students are encouraged to infuse their own commitments into the spectrum of sustainability and service.		Yes		Yes		Yes	Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Art & Art History	ART 110	Global Art History I	Art and architecture of the ancient world.				Yes			
Art & Art History	ART 419	Historiography/Methodology- Art History	Historiography/methodology/research methods in art history.				Yes			
Art & Art History	ART 414	History of Baroque/Rococo Art	17th- and 18th-century visual arts.				Yes			
Art & Art History	ART 356	Illustration	Problems emphasizing media, experimental techniques, and compositions.		Yes		Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Art & Art History	ART 100	Introduction to Visual Arts	Exploration of the development of visual arts.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Art & Art History	ART 360	Painting Methods and Materials	Continuing development of technical skills in oil painting through the use of conceptual prompts.		Yes		Yes			Lecture(s),Guest speaker(s),Readings/Video/Podcast,Discussion/Recitation
Art & Art History	ART 312	Pre-Columbian Art Mesoamerica	Artistic and architectural traditions of major ancient civilizations in Mesoamerica, including the Olmecs, Maya, Teotihuacanos, Mixtecs, and Aztecs, from 1200 bce until the sixteenth-century conquest by Spain.				Yes			
Art & Art History	ART 365	Printmaking II-Lithography	Preparation, processing, and printing techniques in stone and metal plate lithography.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Readings/Video/Podcast,Lab(s),Discussion/Recitation,Service Learning/Community Service,Other (please describe): Focus is on non-toxic and sustainable materials research apart from petroleum distillates
Art & Art History	ART 392	Professional Practices Seminar	Skills and tools beneficial in pursuing professional and/or academic goals in the visual arts.				Yes		Yes	Lecture(s),Readings/Video/Podcast,Module or Unit
Art & Art History	ART 355	Typography and Design Systems	Emphasis on typographic solutions for advertising, corporate identity, packaging, and publication design.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Biochemistry & Molecular Biology	BC 403	Comprehensive Biochemistry II	Metabolic pathways and their regulation; cellular biochemistry.				Yes		Yes	Lecture(s), Quizzes, Other: societal and economic aspects of human disease are incorporated into course content
Biology	BZ 430	Animal Behavior & Conservation	The interface between animal behavior and conservation biology, exploring how behavioral tools can be applied to conservation problems.		Yes					Lecture(s),Guest speaker(s),Readings/Video/Podcast,Discussion/Recitation
Biology	BZ 214	Animal Biology-Vertebrates	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 vertebrates.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Discussion/Recitation
Biology	LIFE 102	Attributes of Living Systems	Levels of organization, stability, and change in living systems.		Yes					Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Biology	LIFE 103	Biology of Organisms	Diversity of animals and plants; their structural and functional characteristics.		Yes					Lab(s)



Biology	BZ 331	Developmental Plant Anatomy	Developmental aspects of growth and differentiation stressed in higher plants and animals.		Yes				Yes	Lecture(s), Readings/Video/Podcast, Discussion/Recitation
Biology	LIFE 320	Ecology	Interrelationships among organisms and their environments using conceptual models and quantitative approaches.		Yes					Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit
Biology	BZ 420	Evolutionary Medicine	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 discourse.		Yes		Yes			Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Biology	BZ 381A2	Exploring Range Shifts	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 novel, publishable research on the impact of global change on species distributions.	Yes						Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Other (please describe): independent research
Biology	BZ 220	Introduction to Evolution	Fundamental concepts in evolutionary biology.		Yes					Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Other (please describe): the Conservation unit covered sustainability
Biology	BZ 415	Marine Biology	Marine organisms, habitats, and communities.		Yes		Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Biology	BZ 475	Marine Mammalogy	Taxonomy, evolution, morphology, physiological adaptations, behavior, and ecology of marine animals.		Yes		Yes		Yes	Lecture(s), Guest speaker(s), Readings/Video/Podcast, Discussion/Recitation
Biology	BZ 425	Molecular Ecology	Introduction to molecular genetic markers for questions in ecology, evolution, behavior, and conservation.		Yes					Lecture(s), Assignments(s)/Graded Deliverable(s), Discussion/Recitation
Biology	BZ 450	Plant Ecology	Relation of plants to their environment.		Yes					Lecture(s)
Biology	BZ 424	Principles-Systematic Zoology	Principles and methods of classification, zoological nomenclature, taxonomic decisions regarding species and higher categories.				Yes			Lecture(s), Discussion/Recitation
Biology	BZ 471	Stream Biology and Ecology	Biology and ecology of running waters.		Yes		Yes			Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Biology	BZ 348	Theory of Population & Evolutionary Ecology	Principles and methods for building, analyzing, and interpreting mathematical models of ecological and evolutionary problems in biology.		Yes					Lecture(s), Assignments(s)/Graded Deliverable(s), Lab(s)

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
Business	BUS 100	Introduction to Business	Overview of functional areas of business: accounting, finance, information systems, management, marketing, and international business.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Business	BUS 479	Strategic Management	An integration of various business subject areas in terms of top-level policy and decision making.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Service Learning/Community Service
Chemical & Biological Engineering	CBE 452	Chemical & Biological Engineering Design II	Projects requiring students to design a chemical and/or biological process with cost estimation and constraint analysis; written and oral reports.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Module or Unit,Discussion/Recitation
Chemical & Biological Engineering	CBE 320	Chemical & Biological Reactors	Mechanisms and rates of chemical reactions; design of homogeneous and heterogeneous reactors; biological 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)
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): Sustainability 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	CHEM 442	Chemistry of Hemp and Cannabis	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 techniques for quantitation.		Yes		Yes		Yes	Lecture(s),Lab(s),Other (please describe): similar to other courses reported here.
Chemistry	CHEM 120	Foundational Modern Chemistry	Fundamental aspects of chemistry and chemical principles, with an emphasis placed on modern atomic and molecular structure theory, structure and reactivity.		Yes					Lecture(s)
Chemistry	CHEM 242	Foundations Organic Chemistry Lab	Laboratory applications of organic chemistry principles.		Yes					Module or Unit,Lab(s)
Chemistry	CHEM 371	Fundamentals of Physical Chemistry	Quantum mechanics; molecular structure and spectroscopy; statistical and equilibrium thermodynamics; kinetics.		Yes					Lecture(s),Assignments(s)/Graded Deliverable(s),Module or Unit

Chemistry	CHEM 372	Fundamentals of Physical Chemistry Lab	Laboratory experiments illustrate the Fundamentals of Physical Chemistry, including atomic and molecular spectroscopy, thermochemistry, chemical equilibrium, and kinetics.		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 educatiol value is compromised while instilling the importance of responsible usage.
Chemistry	CHEM 111	General Chemistry I	Fundamental aspects of chemistry and chemical principles; emphasis on structure, bonding, and stoichiometry.		Yes		Yes	Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Chemistry	CHEM 113	General Chemistry II	Acid/base equilibria, kinetics, thermodynamics, solubility, oxidation-reduction reactions, electrochemistry, selected topics.		Yes		Yes		Lecture(s),Assignments(s)/Graded 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.
Civil & Environmental Engineering	CIVE 322	Basic Hydrology	Hydrologic cycle, soil moisture, groundwater, runoff processes, applications in water resources and environmental engineering.	Yes			Yes	Yes	
Civil & Environmental Engineering	CIVE 467	Design of Reinforced Concrete Structures	Design and behavior of reinforced concrete structural members.		Yes				Assignments(s)/Graded 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	
Civil & Environmental Engineering	CVE 413	Environmental River Mechanics	Fluvial geomorphology, river hydraulics, sediment transport, and river response with special emphasis on 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.		Yes		Yes	Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit
Civil & Environmental Engineering	CIVE 300	Fluid Mechanics	Fluid properties; statics, kinematics, and dynamics of fluid motion including viscous and gravitational effects.		Yes			Yes	Lecture(s),Discussion/Recitation

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	Applied Deliberative Techniques	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)

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
Design & Merchandising	INTD 350	Codes-Health and Safety	Health, safety, and wellness issues in interiors, including laws, codes, standards, regulations, and 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
Design & Merchandising	DM 272	Consumers in the Marketplace	Analysis and evaluation of psychological, social, economic, sustainability, and cultural factors that influence consumers in the marketplace.		Yes		Yes		Yes	Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/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.
Design & Merchandising	AM 364	History of Fashion Designers	Fashion designers and manufacturers who established the field and their contemporaries.				Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module 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
Design & Merchandising	DM 360	Retailing	Examination of retailing principles and practices, including merchandise management, retailing strategy, supply chain management, store management, and sustainable retail operations.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Design & Merchandising	INTD 376	Studio IV Interior Architecture and Design	Applications of creative problem-solving, digital and design skills to develop innovative interior design projects with a focus on medium-scale commercial interiors.		Yes		Yes			Lecture(s)

Design & Merchandising	AM 220	Textiles	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	Textiles/Apparel Supply Chain	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	Introduction Design Thinking	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	Printmaking	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	Economic Forecasting	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
Economics	ECON 320	Economics of Public Finance	Impact of taxes, government expenditures on allocation of resources, distribution of income; evaluation of government expenditure program, tax policies.				Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Economics	ECON 304	Intermediate Macroeconomics	Theory of national income, its measurement and determinants; analysis of inflation, growth, debt, and public policy.		Yes				Yes	Lecture(s),Module or Unit
Economics	ECON 306	Intermediate Microeconomics	Analysis of competitive and noncompetitive markets in terms of efficiency of resource utilization.		Yes		Yes		Yes	Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Economics	ECON 204	Principles of Macroeconomics	Determinants of national output, employment, and price level; inflation and unemployment; fiscal and monetary policy.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Engineering	ENGR 101	Engineering Grand Challenges	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)

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

Environmental & Radiological Health Sciences	ERHS 410	Environmental Health - Air and Waste Management	Preventing and managing hazards from air pollution sources and handling waste; administrative management for air and waste programs.	Yes				Yes	Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Environmental & Radiological Health Sciences	ERHS 320	Environmental Health Water Quality	Identify natural and man-made contaminants that impact water quality and human health; biological, chemical, and physical treatment techniques used to protect water quality.		Yes			Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Environmental & Radiological Health Sciences	ERHS 448	Environmental Contaminants	Pathways of exposure and behavior of environmental contaminants. Exposure assessment in environmental health protection.		Yes					Lecture(s),Assignments(s)/Graded Deliverable(s)
Environmental & Radiological Health Sciences	ERHS 430	Human Disease and Environment	Overview of the human diseases which are associated with the environment.		Yes			Yes		Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Environmental & Radiological Health Sciences	ERHS 332	Principles of Epidemiology	Use of epidemiological methods in studying distribution of diseases in human populations.					Yes		Readings/Video/Podcast,Module or Unit
Ethnic Studies	ETST 370	Caribbean Identities	Development of Caribbean identities from the arrival of Amerindian groups to the abolition of slavery in the nineteenth century.					Yes		Lecture(s)
Ethnic Studies	ETST 281A1	Culturally Responsive Pedagogy - Relationships	Principles, concepts, and applications of culturally responsive teaching and culturally restorative justice.	Yes		Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Ethnic Studies	ETST 265	Culture of Care in Schools	Exploration of the importance of relationships as the focus of education by learning the principles and practices of restorative justice, and culturally appropriate teacher practices.	Yes		Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Ethnic Studies	ETST 180A1	Dialogue, Diversity, Inclusivity, and Access - Social Sciences	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, explore their own perspectives and those of others, and apply this learning to everyday interactions.	Yes		Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Ethnic Studies	ETST 487	Ethnic Studies Internship	Supervised work experience for Ethnic Studies Majors and Minors.	Yes		Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service,Other (please describe): Internship
Ethnic Studies	ETST 205	Ethnicity and the Media	Ethnic representation across time as represented in auto/biography, fiction, poetry, and popular media.					Yes	Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Ethnic Studies	ETST 493	Ethnicity Methods and Writing	Integrates the foundational theories and research approaches of ethnic studies to the study and practice of respectfully engaging underrepresented and marginalized communities at the core of the field.	Yes		Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation,Service Learning/Community Service
Ethnic Studies	ETST 405	Ethnicity/Class/Gender in U.S.	Roles of and interconnections among ethnicity, class, and gender for various groups in the United States.	Yes		Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Ethnic Studies	ETST 444	Federal Indian Law and Policy	Indian policy processes and their impact on Native lives and culture, particularly Native sovereignty.					Yes	Yes	
Ethnic Studies	WS 200	Introduction to Women's Studies	Examination of gender roles in work, education, spirituality, relationships, health, institutions and organizations.	Yes		Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation



Ethnic Studies	ETST 240	Native American Cultural Exploration	Exploration of Indigenous lives and experiences through examination of Indigenous architecture, art, music, film, activism, and literature.		Yes		Yes			Lecture(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Ethnic Studies	ETST 255	Native American History	History of Native American peoples in the United States to the present, including origin stories.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Ethnic Studies	AMST 101	Self/Community - American Culture Since 1877	Critical analysis of the meaning and development of American culture since 1877, through themes of self and community in art, politics, society, and religion.		Yes	Yes			Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Ethnic Studies	ETST 371	The Modern Caribbean	Modern political and socio-economic developments in the Caribbean with emphasis on race, ethnicity, and gender.				Yes			Lecture(s)
Finance & Real Estate	FIN 455	Advanced Portfolio Management	Advanced hedging and portfolio management theory and techniques.		Yes		Yes		Yes	Module or Unit
Finance & Real Estate	FIN 470	Derivative Securities	Futures, options and other derivatives, including their use in hedging, speculation, and arbitrage.		Yes		Yes		Yes	Lecture(s), Discussion/Recitation
Fish, Wildlife & Conservation Biology	FW 111	Basic Outdoor Skills in FWCB	Basic outdoor skills for FWCB and outdoor novices. History of wildlife conservation and reasons for declining outdoor participation.		Yes					Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Module or Unit, Lab(s), Service Learning/Community Service
Fish, Wildlife & Conservation Biology	FW 468	Bird Ecology and Conservation	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, employ field methods (e.g., bird banding), participate in long-term applied research projects, collect and analyze data independently, and interact with conservation practitioners.		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
Fish, Wildlife & Conservation Biology	FW 469	Conservation & Management of Large Mammals	Principles of behavior, ecology, population dynamics, and conservation related to large mammals.	Yes			Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Lab(s), Discussion/Recitation
Fish, Wildlife & Conservation Biology	FW 475	Conservation Decision Making	Structured approaches to conservation and management of vertebrates; articulating objectives, developing management options, and predicting outcomes.	Yes			Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Discussion/Recitation
Fish, Wildlife & Conservation Biology	FW 400	Conservation of Fish in Aquatic Ecosystems	Ecological processes that create habitat and biotic template for fish in aquatic ecosystems; human effects; strategies for conserving fishes.	Yes			Yes			
Fish, Wildlife & Conservation Biology	FW 402	Fish Culture	Principles and practices to produce food, bait, and sport fishes.		Yes		Yes			Lecture(s), Readings/Video/Podcast, Discussion/Recitation
Fish, Wildlife & Conservation Biology	FW 204	Introduction to Fishery Biology	Exposure to sampling techniques, agencies, and topics in fishery biology careers.		Yes					Lecture(s)
Fish, Wildlife & Conservation Biology	FW 472	Issues in Animal Conservation	Current and emerging issues in fish and wildlife conservation and management at the state, national, and global scales.		Yes		Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Fish, Wildlife & Conservation Biology	FW 465	Managing Human-Wildlife Conflicts	Methods for resolving conflicts caused by wildlife; integrating animal behavior, population dynamics, economics, and human dimensions into solutions.	Yes			Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Lab(s), Discussion/Recitation

Fish, Wildlife & Conservation Biology	FW 179	New-to-the-Major Seminar	Introduces students new to the Fish, Wildlife, and Conservation Biology major to curriculum, faculty, research, key concepts, careers, professional development, and other students.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Fish, Wildlife & Conservation Biology	FW 455	Principles of Conservation Biology	Review of efforts to study and conserve biological diversity, focused on fish and wildlife populations.	Yes			Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Fish, Wildlife & Conservation Biology	FW 260	Principles of Wildlife Management	Ecology principles applied to conservation and management of fish/wildlife resources. Quantitative methods, socioeconomic factors, population dynamics.	Yes			Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Lab(s),Discussion/Recitation
Fish, Wildlife & Conservation Biology	FW 430	Waterfowl Ecology Management	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 field trips will develop practical field skills in waterfowl biology, conservation, and management in addition to data analysis and computing skills.	Yes			Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Lab(s),Discussion/Recitation
Fish, Wildlife & Conservation Biology	FW 471	Wildlife Data Collection & Analysis	Analysis methods used in wildlife management and research; adaptive resource management with emphasis on learning through field and computer labs.		Yes		Yes			Lecture(s),Assignments(s)/Graded Deliverable(s)
Fish, Wildlife & Conservation Biology	FW 104	Wildlife Ecology/Conservation	Essentials of wildlife ecology as a foundation for understanding issues on the origins, management and conservation of biodiversity.	Yes			Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Food Science & Human Nutrition	FTEC 360	Brewing Process	Influence of raw material selection, malting, mashing, boiling, and fermentation on quality of beverages.		Yes				Yes	Lecture(s),Guest speaker(s),Module or Unit
Food Science & Human Nutrition	FTEC 422	Brewing Science I	Application of scientific and technical aspects of malting, brewing, fermenting, finishing, packaging, and sensory evaluation of beer.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Lab(s),Discussion/Recitation
Food Science & Human Nutrition	FTEC 460	Brewing Science II	Assessment, quantification, and control of all aspects of commercial beer production from malting through packaging and dispensing.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Lab(s),Discussion/Recitation
Food Science & Human Nutrition	FSHN 451	Community Nutrition	Influences on nutritional status, assessment of nutrition problems and needs, planning and evaluation of nutrition intervention programs.			Yes				
Food Science & Human Nutrition	FSHN 445	Early Health Safety Nutrition	Planning, promoting and maintaining healthy life style and safe learning environment for preschool children. Nutrition, first aid and safety, physical activity, identifying and reporting abuse, prevention and management of acute illness and chronic disease and promotion of a high-quality indoor and outdoor environment, targeted for the early childhood education professional.					Yes		Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Food Science & Human Nutrition	FSHN 380A1	Food As Medicine	Food consumption patterns, individual foods, and specific food constituents (nutrients and phytochemicals) associated with health benefits.			Yes				
Food Science & Human Nutrition	FTEC 400	Food Safety	Safety of human food emphasizing safe production, processing, marketing, preparation, consumption, and regulations.		Yes		Yes		Yes	Lecture(s),Readings/Video/Podcast,Discussion/Recitation

Food Science & Human Nutrition	FTEC 496A	Group Study Fermentation Science: Current Issues	Explore emerging health issues associated with fermented foods and beverages.		Yes		Yes			Lecture(s), Readings/Video/Podcast, Discussion/Recitation
Food Science & Human Nutrition	FSHN 350	Human Nutrition	Metabolism of macro and micronutrients; physiologic basis underlying dietary recommendations for human health. Nutrients, dietary requirements for physical well-being; evaluation of various diets.				Yes			Lecture(s)
Food Science & Human Nutrition	FSHN 150	Survey of Human Nutrition	Basic nutrition principles and concepts; their application to personal health and interactions with societal and environmental issues.	Yes		Yes				
Forest & Rangeland Stewardship	NR 300	Biological Diversity	Biological diversity examined in context of species; extinction. Principles, techniques of conservation biology utilized to understand and resolve issues.	Yes			Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Service Learning/Community Service
Forest & Rangeland Stewardship	NR 140	Diversity and Inclusion in Natural Resources	Builds a foundation for cultural competency that embraces human diversity and inclusion, through exploration of the complex historical and contemporary relationships among race, ethnicity, culture, socio-economic status, gender, and natural resources.		Yes		Yes			Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Forest & Rangeland Stewardship	RS 478	Ecological Restoration	Analysis of environmental factors influencing restoration of disturbed lands and practices for successful restoration of disturbed ecosystems.	Yes			Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation, Service Learning/Community Service
Forest & Rangeland Stewardship	NR 310	Ecosystem Services	Life-supporting and life-fulfilling benefits that nature provides to humans; theory, case studies, and policy.	Yes			Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit
Forest & Rangeland Stewardship	NR 375	Environment and Natural Resources Leadership	Environment and natural resources leadership history, skills, and styles. Creation of leadership path and organization prescriptions.		Yes	Yes				
Forest & Rangeland Stewardship	NR 120A	Environmental Conservation	Overview of natural resources environmental concerns including population, pesticides, energy, and pollution.		Yes		Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Lab(s), Service Learning/Community Service
Forest & Rangeland Stewardship	NR 440	Fire Economics & Policy	Development of wildlife and fuel management economics integrated with critical federal policies.	Yes			Yes			
Forest & Rangeland Stewardship	NR 450	Geospatial Project Design	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 emphasized.		Yes					Lab(s)
Forest & Rangeland Stewardship	NR 322	Introduction -Geographic Information Systems	Fundamental concepts of spatial data handling and computer-assisted map analysis.		Yes					Lecture(s), Guest speaker(s), Lab(s)
Forest & Rangeland Stewardship	NR 220	Natural Resource Ecology & Measurements	Ecology of Rocky Mountains ecosystems. Basic measurements and integrated management of natural resources.		Yes		Yes			Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Lab(s)
Forest & Rangeland Stewardship	NR 320	Natural Resources History & Policy	History, values and institutions, and policy process guiding natural resources management and conservation.	Yes			Yes			Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit

Forest & Rangeland Stewardship	NR 425	Natural Resource Policy & Sustainability	Principles, concepts, and operating examples of sustainable resource management with a concentration on forest policies and practices.	Yes			Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Forest & Rangeland Stewardship	NR 321	Natural Resources Rights and Reconciliation	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 knowing and peoples and for addressing social and environmental justice issues in natural resource conservation, stewardship, and management.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Service Learning/Community Service
Forest & Rangeland Stewardship	NR 400	Public Communications in Natural Resources	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 collaborating in teams with real-life 'clients'.		Yes	Yes				
Forest & Rangeland Stewardship	RS 432	Rangeland Measurements	Vegetation sampling and field measurements emphasizing applications for monitoring and adaptive management.		Yes				Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Module or Unit,Lab(s)
Forest & Rangeland Stewardship	RS 312	Rangeland Plant ID Lab	Identification of characteristic grasses, forbs, and shrubs common to North American rangelands.		Yes					Lab(s)
Forest & Rangeland Stewardship	NR 479	Restoration Case Studies	Analysis and evaluation of ecological restoration projects.	Yes			Yes			Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Geosciences	GEOL 442	Applied Geophysics	Geophysical exploration methods emphasizing hydrocarbon and mineral exploration, hydrogeology, and engineering applications.		Yes				Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Lab(s)
Geosciences	GEOL 446	Environmental Geology	Geology applied to environmental problems.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Geosciences	GEOL 120	Exploring Earth - Physical Geology	Develops scientific understanding through introduction to earth processes, materials, resources, and hazards.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Geosciences	GEOL 192	Exploring Geosciences	Geosciences as a field of study; exploration of the major and career paths; strategies for academic success and beyond.		Yes		Yes			Lecture(s),Guest speaker(s)
Geosciences	GEOL 376	Geologic Field Methods	Scientific, surveying, and mapping methods used in geologic field studies; proposal, map, and report preparation.		Yes					Lab(s)
Geosciences	GEOL 124	Geology of Natural Resources	Develops scientific understanding through introduction to the origin, use and environmental impact of geological resources extracted from the Earth.	Yes			Yes			
Geosciences	GEOL 122	Geology of the Environment	Develops scientific understanding through introduction to geological processes, natural hazards, earth resources, and their impacts on society.		Yes					Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Geosciences	GEOL 454	Geomorphology	Origin of landforms; morphology and processes.		Yes					Lecture(s),Lab(s)

Geosciences	GEOL 380A2	Glacial Geology	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 history.		Yes					Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Geosciences	GEOL 154	Historical & Analytical Geology	Physical and biological history of Earth with introduction to laboratory, computer, and field techniques.		Yes					Lecture(s),Readings/Video/Podcast,Lab(s)
Geosciences	GEOL 452	Hydrogeology	Interaction of water and geologic materials; surface and groundwater; quantitative analysis and geologic effects on quality and flow of groundwater.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Lab(s)
Geosciences	GEOL 110	Introduction to Geology - Parks and Monuments	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 national and local parks and monuments, using narrated high-resolution (including aerial) video.	Yes				Yes		
Geosciences	GEOL 121	Introductory Geology Lab	Laboratory applications of introductory geology.		Yes					Readings/Video/Podcast,Lab(s)
Geosciences	GEOL 447	Mineral Deposits	Occurrence, origin, and exploration of economic metallic mineral deposits.		Yes				Yes	Lecture(s),Assignments(s)/Graded Deliverable(s)
Geosciences	GEOL 150	Physical Geology for Scientists & Engineers	Earth materials, structures, and surface processes. Geologic analysis using field data, topographic and geologic maps, and aerial photos.		Yes		Yes	Yes		Lecture(s),Assignments(s)/Graded Deliverable(s),Lab(s),Discussion/Recitation
Geosciences	GEOL 250	The Solid Earth	Structure, flow, and composition of the deep Earth; introduction to geophysics; tests of plate tectonic theory.		Yes					Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Health & Exercise Science	HES 420	Electrocardiograph & Exercise Management	Interpretation of 12-lead ECG tracings, administering exercise tests, and prescribing exercise program for healthy individuals and special populations.					Yes		Lecture(s),Lab(s),Discussion/Recitation
Health & Exercise Science	HES 340	Exercise Prescription	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, effective, and efficient individual workout programs.				Yes			
Health & Exercise Science	HES 145	Health and Wellness	Personal health behaviors and personal choice in response to wellness.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s)
Health & Exercise Science	HES 345	Population Health & Disease Prevention	Causes of disease throughout the lifespan and interventions designed to prevent disease.			Yes				
History	HIST 355	American Environmental History	Interaction of humans and nature in American history with emphasis on relationships between environmental, social, and cultural change.		Yes			Yes	Yes	Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service
History	HIST 121	Asian Civilizations II	Transformation of major intellectual and cultural patterns and the process of globalization in modern Asia.		Yes			Yes	Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
History	HIST 452	China Since 1600	Historical developments in China since 1600.		Yes			Yes	Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation

History	HIST 478	Heritage Resource Management	Cultural resource laws and policy; practices commonly employed in the management and preservation of these diverse resources.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation,Service Learning/Community Service
History	HIST 412	Mexico	Social, economic, and political development of Mexican people from pre-Columbian times to present.		Yes	Yes			Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
History	HIST 479	Practice of Public History	Public history methods and career paths into interpretation, museums, archives, historic preservation, oral history, and other fields.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Readings/Video/Podcast,Discussion/Recitation
History	HIST 455	Tokugawa and Modern Japan	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 issues related to war, peace, and Japan's international role are also discussed.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
History	HIST 151	U.S. History Since 1876	Major issues and themes in the historical development of the United States since Reconstruction.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Horticulture & Landscape Architecture	HORT 464A	Arboriculture	Practices used by arborists and landscape managers to plant, appraise and maintain landscape trees.	Yes			Yes			
Horticulture & Landscape Architecture	LAND 444	Ecology of Landscapes	Theories, methods, and practices for interpreting, describing, and representing natural and human modified landscapes.	Yes			Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Horticulture & Landscape Architecture	LAND 241	Environmental Analysis	Exploration and understanding of natural and cultural landscapes through analytical simulation techniques.		Yes		Yes			Lecture(s),Assignments(s)/Graded Deliverable(s)
Horticulture & Landscape Architecture	HORT 476	Environmental Plant Stress Physiology	Plant growth, development and physiology, major sources of stress in plants, global issues in environment and plant stress.	Yes					Yes	
Horticulture & Landscape Architecture	HORT 171	Environmental Issues-Agriculture	Historical development of agriculture; environmental consequences of modern food production and other cultural approaches to agriculture.	Yes		Yes				
Horticulture & Landscape Architecture	HORT 412	Floriculture Crops	Commercial production and marketing of bedding plants, potted container crops, and cut flowers.		Yes		Yes		Yes	Lecture(s),Discussion/Recitation
Horticulture & Landscape Architecture	HORT 322	Herbaceous Plants	Identification, landscape features, cultural requirements, and uses of ornamental annual, perennial, and bulb plants.	Yes			Yes			
Horticulture & Landscape Architecture	HORT 100	Horticultural Science	Principles of plant science and related disciplines as the base and context for the introduction of horticultural practices.		Yes		Yes		Yes	Lecture(s),Lab(s)
Horticulture & Landscape Architecture	HORT 221	Landscape Plants	Identification, landscape features, cultural requirements, and landscape use of coniferous and deciduous trees and shrubs, vines, and evergreens.	Yes			Yes			
Horticulture & Landscape Architecture	HORT 321	Nursery Production & Management	Nursery industry organization, management, equipment, field and container production, storage, shipping, marketing, and business management practices.	Yes			Yes		Yes	
Horticulture & Landscape Architecture	HORT 192	Orientation Hort and LandArch	First year course in horticulture and landscape architecture. Information and skills necessary to succeed in majors in the Department of Horticulture and Landscape Architecture.		Yes		Yes			

Horticulture & Landscape Architecture	HORT 424	Topics in Organic Agriculture	Examination of issues specific to organic food production systems and marketing.	Yes			Yes			
Horticulture & Landscape Architecture	HORT 466	Urban and Community Forestry	Policies and management of publicly and privately owned community forests in urbanized areas.	Yes		Yes				
Horticulture & Landscape Architecture	LAND 446	Urban Design	Designing the urban landscape, including precedent exploration about overall image, materials, and structure of the city and its components.		Yes		Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation, Service Learning/Community Service
Horticulture & Landscape Architecture	HORT 462	Viticulture Practices -Grape Production	Biology of grapevines and vineyard management including planting, training, pest control, pruning, and harvesting; special emphasis on Colorado.		Yes				Yes	Lecture(s)
Human Development & Family Studies	HDFS 439	Administration of Early Child Programs	Center administration related to program development and operations, budgeting, state regulations and licensing, and personnel issues.				Yes			Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Human Development & Family Studies	HDFS 311	Adolescent/Early Adult Development in Context	Physical, cognitive, and socioemotional development of adolescents and young adults in context of family, relationships, and culture.				Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
Human Development & Family Studies	HDFS 350	Applied Research Methods	Analyze, interpret, apply, and write about research findings in human development.				Yes			Lecture(s), Assignments(s)/Graded Deliverable(s)
Human Development & Family Studies	HDFS 402	Couple and Family Studies	Theory and research concerning couple and family processes; social contexts in which couples and families change over time.				Yes			Lecture(s), Assignments(s)/Graded Deliverable(s)
Human Development & Family Studies	HDFS 217	Creative Experiences-Children	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, creativity, and development in educational, medical, and therapeutic settings.		Yes		Yes		Yes	Lecture(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Human Development & Family Studies	HDFS 317	Disabilities in Early Childhood Education	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-language pathology, music therapy, and applied behavioral analysis.				Yes			Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast
Human Development & Family Studies	HDFS 315	Disability across the Lifespan	Use of interdisciplinary perspective to understand individuals who have disabling conditions relevant to careers in health, educational, rehabilitation, and human service professions. Causes, outcomes, and intervention of commonly occurring disabilities and health conditions (e.g., congenital disabilities, diabetes, spinal cord injuries).			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 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/Recitation
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 sustainability
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,Discussion/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



Human Dimensions of Natural Resources	NRRT 460	Tourism Event Planning	Foundation in planning, organizing, and producing tourism special events and conferences. Functions and strategies necessary for effective tourism event management.		Yes		Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
International Education	IE 470	Women and Development	Research and policy issues related to women in developing countries.		Yes	Yes			Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit
Intra-University	IU 274	Learning Assistants - Higher Education	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 practice includes questioning techniques, motivation and cooperative learning, and small group facilitation.				Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit
Intra-University	IU 172	New Student Seminar	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 a member of CSU's inclusive campus community.				Yes			Lecture(s), Readings/Video/Podcast, Discussion/Recitation
Journalism & Media Communication	JTC 419	Food & Natural Resources Communication	Natural resources issues and the role of news media, PR, and advertising and how people form beliefs about food and natural resources in communication.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Journalism & Media Communication	JTC 319	Science and Environmental Communication	Concepts and skills related to the process and products of science communication in journalism, advocacy, strategic communication, and online media.		Yes		Yes			Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit
Languages, Literatures & Cultures	LSPA 400	Advanced Communication Skills-Spanish	Development of speaking, reading, and writing proficiency through an in-depth examination of representative writings and media communications.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Languages, Literatures & Cultures	LITA 337	Cinema, Culture, and Society	Examination of how historical, social, political, and economic forces have shaped Italian society and culture in the modern period, including contemporary Italy, through the prism of film. Taught in Italian.				Yes		Yes	Missing
Languages, Literatures & Cultures	LITA 100	First-Year Italian I	Essentials of Italian for the beginner: aural comprehension, speaking, reading, writing.				Yes			Lecture(s)
Languages, Literatures & Cultures	LITA 101	First-Year Italian II	Essentials of Italian for the continuing student: aural comprehension, speaking, reading, writing.				Yes		Yes	Lecture(s), Discussion/Recitation
Languages, Literatures & Cultures	LSPA 313	Introduction to Spanish Translation & Interpreting	Translation and interpreting of written and oral texts into and from the Spanish language.		Yes		Yes		Yes	Assignments(s)/Graded Deliverable(s), Discussion/Recitation, Service Learning/Community Service
Languages, Literatures & Cultures	LSPA 335	Issues in Hispanic Culture	Historical context of contemporary issues in the culture of Spanish-speaking countries.			Yes			Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Languages, Literatures & Cultures	LSPA 300	Reading & Writing for Communication - Spanish	Development of reading and writing proficiency through an in-depth examination of contemporary writing.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Languages, Literatures & Cultures	LITA 201	Second-Year Italian II	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 level target of intermediate-mid.		Yes		Yes		Yes	Lecture(s), Module or Unit

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,Discussion/Recitation
Languages, Literatures & Cultures	LSPA 201	Second-Year Spanish II	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, listening and reading) with a focus on a proficiency level target of intermediate-mid.		Yes		Yes			Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Languages, Literatures & Cultures	LSPA 379	Service Learning-Spanish	Language-related voluntary community work.		Yes		Yes		Yes	Assignments(s)/Graded Deliverable(s),Service Learning/Community Service
Languages, Literatures & Cultures	LSPA 479	Service Learning-Spanish	Language-related voluntary community work.		Yes		Yes		Yes	Assignments(s)/Graded Deliverable(s),Service Learning/Community Service
Languages, Literatures & Cultures	LSPA 347	Spanish for Youth and Families	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 youth and families from the Spanish-speaking community.					Yes	Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Languages, Literatures & Cultures	LSPA 454	Topic Studies in Spanish	Selected topic studies such as themes, topoi, and interdisciplinary studies in literature.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Liberal Arts	LB 393	Seminar in Arts, Humanities, Social Sciences	Special topics team-taught course in the arts and/or humanities and/or social sciences that crosses disciplinary boundaries.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Module or Unit,Discussion/Recitation
Liberal Arts	LB 173	Encountering the Global	Introduction to arts and humanities within a global cultural context via interdisciplinary approaches and cultural materials, or texts broadly conceived from the fields of literature, history, music, film, the visual arts, popular culture, etc., for a greater appreciation and experience of global cultures.			Yes				Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Other (please describe): Field trip to Gregory Allicar Museum
Liberal Arts	LB 492	Liberal Arts Capstone Seminar	Integration and reflection for liberal arts majors with an emphasis on core competencies and academic, professional and/or career transitions.				Yes		Yes	Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Management	MGT 377	Advanced Logistics	Advanced design and management of logistics and distribution operations within global supply chains.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Management	MGT 320	Contemporary Management Principals and Practices	Principles of management in combination with practices of the new economy to achieve managerial goals.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s)
Management	MGT 330	Creativity Innovation Value	How creativity and innovation can be developed for application in value creation.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Management	MGT 340	Fundamentals of Entrepreneurship	Concepts of entrepreneurship and role of entrepreneurs in the economy.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Module or Unit,Discussion/Recitation

Management	MGT 475	Internataional Business Management	Multinational corporations: their scope, activities, managerial problems and decisions.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Management	MGT 410	Leadership and Organizational Behavior	Behavior of people and groups as members of organizations.			Yes				Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Module or Unit,Discussion/Recitation
Management	MGT 420	New Venture Creation	Entrepreneurs and the entrepreneurial process. Growth of an independent business.		Yes		Yes		Yes	Lecture(s),Discussion/Recitation
Management	MGT 486A	Practicum Consulting	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 management, group dynamics, and team work skills.		Yes					Module or Unit,Service Learning/Community Service
Management	MGT 486B	Practicum: Supply Chain Management	Research and recommend solutions to "real world" supply chain management problems.		Yes				Yes	Service Learning/Community Service
Management	MGT 301	Supply Chain Management	Concept of value-driven supply chains; design and management of effective supply chains; emphasis on current practice and recent trends.		Yes				Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Marketing	MKT 330	Business Customer Relationships	Managing relationships with distribution channel intermediaries and business customers.				Yes		Yes	Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Marketing	MKT 479	Marketing Strategy & Management	Marketing decisions involving integration of elements of the marketing mix.				Yes		Yes	Lecture(s)
Marketing	MKT 360	Retailing	Examination of retailing principles and practices, including merchandise management, retailing strategy, supply chain management, store management, and sustainable retail operations.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Readings/Video/Podcast,Discussion/Recitation
Marketing	MKT 363	Sales Management	Recruiting, selecting, training, compensating, motivating, supervising, and evaluating a sales force.				Yes		Yes	Lecture(s)
Mathematics	MATH 348	Theory of Population & Evolutionary Ecology	Principles and methods for building, analyzing, and interpreting mathematical models of ecological and evolutionary problems in biology.		Yes					Lecture(s),Assignments(s)/Graded Deliverable(s),Lab(s)
Mechanical Engineering	MECH 463	Building Energy Systems	Comfort, psychrometrics, loads, solar radiation, heating and cooling system design, transport, solar system design, economics.	Yes		Yes				
Mechanical Engineering	MECH 403	Energy Engineering	Energy generation, conversion, distribution, storage, and efficiency, including analysis of power generation systems associated with fossil fuels, biofuels, solar, wind, geothermal, hydropower, tidal, and nuclear energy.	Yes		Yes				
Mechanical Engineering	MECH 202	Engineering Design II	The engineering design process with emphasis on teamwork, ideation, decision-making, and project planning as applied to a group design project in mechanical engineering.		Yes		Yes		Yes	Lecture(s)
Mechanical Engineering	MECH 486A	Engineering Design Practicum I	Capstone engineering design project; transition experience to the mechanical engineering profession in industry and graduate education.		Yes		Yes		Yes	Guest speaker(s),Service Learning/Community Service

Mechanical Engineering	MECH 486B	Engineering Design Practicum II	Capstone engineering design project; transition experience to the mechanical engineering profession in industry and graduate education.	Yes	Yes	Yes	Guest speaker(s),Service Learning/Community Service
Mechanical Engineering	MECH 434	Materials Selection	Procedures for selecting the optimal material(s) for mechanical engineering design under multiple constraints, including reliability, safety, functionality, cost, and environmental impact.	Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Other (please describe): Use of software for materials selection that has sustainability as one of the criterion
Mechanical Engineering	MECH 342	Mechanics & Thermodynamic - Flow Process	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 applications such as pumps, compressors, turbines, and airfoils.	Yes			
Mechanical Engineering	MECH 337	Thermodynamics	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 cycles.	Yes	Yes		Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Microbiology, Immunology & Pathology	MIP 400L	Capstone: Microbiome Biology	Discussion of literature on a topic of importance to the research community in the discipline.	Yes	Yes	Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Microbiology, Immunology & Pathology	MIP 300	General Microbiology	Structure, function, development, physiology, and molecular biology of microorganisms emphasizing bacteria.	Yes	Yes		Lecture(s),Guest speaker(s),Discussion/Recitation
Microbiology, Immunology & Pathology	MIP 302	General Microbiology Lab	Laboratory skills and techniques for isolating, characterizing, and identifying bacteria.	Yes	Yes		Lecture(s),Module or Unit,Lab(s),Discussion/Recitation
Music, Theatre & Dance	TH 251	Acting II	Second in four-part acting sequence. Application of the given circumstances to a text and development of characterization, foundational course in scene work, and "inside- out" approaches to acting vocabulary.			Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Music, Theatre & Dance	MU 417	Counterpoint	Contrapuntal techniques from the Middle Ages through the 20th century; development of compositional skills in counterpoint.			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Music, Theatre & Dance	MU 132	Exploring World Music	Global aspects of music and its meaning with connections to the environment, sound, and world cultures.	Yes	Yes		
Music, Theatre & Dance	TH 141	Introduction to Theatre	Theatre as an art form and one of the humanities, its impact on society, and its relationship to other art forms.			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Music, Theatre & Dance	MU 118	Music Theory II	Four-part diatonic writing; diatonic sequences and related linear techniques; diatonic modulation.			Yes	Readings/Video/Podcast,Discussion/Recitation
Music, Theatre & Dance	MU 440	Music Therapy Methods I	Relation of music to the needs of developmental and aging populations. Techniques for formulating objectives, designing and implementing programs, and evaluation.		Yes		
Music, Theatre & Dance	MU 444	Music Therapy Methods III	Music therapy techniques: assessment, formulating objectives, designing and implementing programs, evaluation, problem solving, and creativity. Focus is on medical settings.			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation

Music, Theatre & Dance	MU 250	Music Therapy Practice	Development of fundamental interactive and professional skills used in music therapy practice.				Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Service Learning/Community Service
Music, Theatre & Dance	TH 400	Production Workshop	Major performance production assignment in acting, assistant/directing, or dramaturgy in department season.				Yes			Discussion/Recitation,Other (please describe): Might be the content in the play; varies by production.
Music, Theatre & Dance	MU 342	Psychology of Music	Psychological aspects of music: perception, psychoacoustics, aesthetics, musical function, communication, measurement, and affective responses.			Yes				
Music, Theatre & Dance	MU 343	Research Methods Music Therapy	Techniques of observing, measuring, and recording behavior. Basic experimental methods and procedures used in music therapy research.				Yes			Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Music, Theatre & Dance	MU 466	Song Literature	Development of song as an art form from monody to German Lieder, French school, and contemporary songs of England and America.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Music, Theatre & Dance	MU 404	Symphonic Wind Ensemble	Performance of wind ensemble and band literature emphasizing most challenging of repertoire, using a select ensemble of performers.				Yes			Assignments(s)/Graded Deliverable(s),Lab(s),Discussion/Recitation,Service Learning/Community Service
Music, Theatre & Dance	MU 402	Theater/Chamber Orchestra	Performance of selected operas, musicals, oratorio, orchestral accompaniments, and chamber music.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Lab(s)
Music, Theatre & Dance	MU 302	University Orchestra	Rehearsal and performance of standard orchestral literature.				Yes			Assignments(s)/Graded Deliverable(s),Lab(s)
Natural Sciences	NSCI 193	CNS Career Seminar	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, and interests imperative to being successful in a career search.				Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Natural Sciences	NSCI 181A3	Diversity Through Technology	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 professors and researchers from diverse backgrounds.				Yes			
Philosophy	PHIL 205	Introduction to Ethics	Problems and theories concerning values and standards, right action, and the good life.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Physics	PH 121	General Physics I	Concepts of force, torque, energy, momentum, work used to cover fluids, waves, sound, temperature, heat; biological, physical examples (noncalculus).		Yes		Yes		Yes	Lecture(s),Readings/Video/Podcast,Service Learning/Community Service
Physics	PH 122	General Physics II	Electricity including electrostatics and simple circuits; magnetism; optics; nuclear physics, radiation; biological, physical examples (noncalculus).		Yes		Yes		Yes	Lecture(s),Readings/Video/Podcast,Service Learning/Community Service

Physics	PH 462	Statistical Physics	Maxwell-Boltzmann, Fermi-Dirac, and Bose-Einstein distribution functions; kinetic theory; applications to solids, metals, semiconductors, and gases.		Yes					Lecture(s)
Political Science	POLS 492	Capstone Seminar	Advanced seminar that integrates different theories and approaches to the study of domestic and/or international politics and policy.		Yes		Yes		Yes	Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Political Science	POLS 421	Contemporary Political Theories	Major political theories and ideologies of contemporary times.		Yes		Yes		Yes	Lecture(s), Readings/Video/Podcast, Discussion/Recitation
Political Science	POLS 422	Democratic Theory	Competing approaches to the theory and practice of democracy, both locally and globally.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Discussion/Recitation
Political Science	POLS 442	Environmental Politics in Developing World	Examines environmental politics in developing countries and evaluates climate change, natural resource governance and environmental justice.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Political Science	POLS 331	Politics & Society Along Mexican Border	Analysis of U.S.-Mexican relations and domestic politics as these affect regional characteristics and development of U.S.-Mexican border region.		Yes					Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast
Political Science	POLS 302	Political Parties & Elections	Foundational, institutional, and behavioral features of American political parties and elections.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Service Learning/Community Service
Political Science	POLS 460	Public Policy Process	Explanations of U.S. policy formation, implementation, and impact.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Political Science	POLS 103	State & Local Government & Politics	Principles, organization, and operation of American state and local government.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Psychology	PSY 310	Basic Counseling Skills	Psychologically-based interpersonal communication skills; rapport building, gathering information and bringing about change in others.			Yes				Lecture(s), Guest speaker(s)
Psychology	PSY 493	Capstone Seminar	Special, controversial, and emerging topics in psychology, considered in the context of foundational knowledge and principles from the field.				Yes			Assignments(s)/Graded Deliverable(s), Discussion/Recitation
Psychology	PSY 316	Environmental Psychology	Social psychological theory and research on effects of behavior on the environment; environmental influences on behavior.	Yes			Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast
Psychology	PSY 488	Field Placement	Supervised affiliation with and/or service work in approved psychological setting.			Yes				
Psychology	PSY 366	Foundational Addiction Counseling Skills	Entry level training in the treatment of substance use disorders with a focus on introductory motivational interviewing and group therapy for individuals with substance use disorders.			Yes				
School of Education	FACS 479	Colloquium-Family and Consumer Sciences	Current topics and issues related to professional roles, responsibilities, and opportunities in Family and Consumer Sciences locally, nationally, and globally.			Yes				
School of Education	EDUC 265	Culture of Care in Schools	Exploration of the importance of relationships as the focus of education by learning the principles and practices of restorative justice, and culturally appropriate teacher practices.		Yes	Yes			Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation

School of Education	FACS 380A1	Family & Consumer Science Research	Exploration of family and consumer sciences scholarship and research, current trends--nationally 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,Discussion/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,Discussion/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,Discussion/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,Discussion/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,Discussion/Recitation

Sociology	SOC 333	Gender and Society	Analysis of social organization of gender in contemporary society, emphasizing gendered experiences and institutional linkages.				Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation,Service Learning/Community Service
Sociology	SOC 344	Health, Medicine, and Society	Examines how race, gender, and social class influence determinants of health and access to care. Discusses the rising cost of health care, the power of the pharmaceutical industry, the medicalization of illness, and new emerging biomedical technologies.		Yes		Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation,Service Learning/Community Service
Sociology	SOC 100	Introduction to Sociology	Introduces a way of viewing interactions, relationships, and social phenomena that mold everyday experiences. Examines how social structures shape interactions, and how society constructs social categories and meanings.			Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Sociology	SOC 311	Methods of Sociological Inquiry	Covers methods sociologists use to conduct empirically grounded and theoretically engaged research. Examines research design, the role of theory, ethics, and multiple methods for gathering data.				Yes		Yes	Lecture(s),Discussion/Recitation
Sociology	SOC 205	Race-Ethnic Relations	Introduction to major theories and research in the sociology of race and racism. Examines historical and contemporary racial inequalities, with a focus on systemic and structural racism.		Yes	Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Sociology	SOC 380A2	Science, Technology, Society	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 debates over vaccines and climate change.		Yes		Yes			Lecture(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Sociology	SOC 314	Applications of Quantitative Research	Covers quantitative data acquisition, cleaning, management and analysis. Introduces an analytical software package to clean, merge, and manage data. Provides tools to perform quantitative analyses and present results using tables and figures.				Yes		Yes	Lecture(s),Lab(s),Discussion/Recitation
Sociology	SOC 362	Social Change	Sources of stability and stress in changing societies, consequences of planned and unplanned change; future trends.	Yes			Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Service Learning/Community Service
Sociology	SOC 330	Social Inequality	Explores patterns in, and theories of, social inequality in the United States and internationally.			Yes				
Sociology	SOC 105	Social Problems	Examines social problems related to differences in power and privilege. Investigates how social problems emerge and the people and communities they harm. Considers how people contest social problems and develop and implement solutions.	Yes					Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation,Service Learning/Community Service
Sociology	SOC 463	Sociology of Disaster	Determinants and consequences of behavior and response to environmental extremes including floods, earthquakes, wind, severe storms, and technological emergencies.		Yes	Yes				Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Sociology	SOC 455	Sociology of Law	Investigates how social forces create laws and how they are enforced in society.				Yes		Yes	Lecture(s),Readings/Video/Podcast,Discussion/Recitation



Sociology	SOC 357	Women, Crime, & Victimization	Examines sociological research, policy, and programming that addresses women's and girls' experiences with crime, victimization, and the criminal processing system more broadly.			Yes			Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Soil & Crop Sciences	SOCR 343	Composting Principles/Practice	Fundamentals of compost production, use, and regulation.	Yes		Yes				
Soil & Crop Sciences	SOCR 421	Crop and Soil Management Systems II	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 previous courses and applying this knowledge toward an interdisciplinary analysis of agroecosystems.	Yes			Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Lab(s)
Soil & Crop Sciences	SOCR 442	Forest and Range Soils	Soil and water relationships in forest and rangeland ecosystems; significant properties in their management.	Yes						Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Soil & Crop Sciences	SOCR 100	General Crops	Production and adaptation of cultivated crops; principles affecting growth, development, management, and utilization.		Yes					Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Lab(s), Discussion/Recitation
Soil & Crop Sciences	SOCR 371	Irrigation of Field Crops	Management of irrigation systems for field crops with emphasis on irrigation methods, irrigation scheduling and strategies for water conservation.		Yes		Yes			Lecture(s), Assignments(s)/Graded Deliverable(s), Discussion/Recitation
Soil & Crop Sciences	SOCR 370	Irrigation Principles & Management	Determination of irrigation water requirements based on the estimation of storage and movement of water in the soil-plant-atmospheric system.		Yes		Yes			Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Module or Unit
Soil & Crop Sciences	SOCR 440	Pedology	Process of soil formation, characterization, classification of soils; soil survey methods.	Yes						Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Lab(s), Discussion/Recitation
Soil & Crop Sciences	SOCR 200	Seed Anatomy & Identification	Principles of seed anatomy including reproduction, identification, and seed characteristics of plant families.		Yes					Readings/Video/Podcast, Discussion/Recitation
Soil & Crop Sciences	SOCR 201	Seed Development & Metabolism	Basic processes controlling seed development, maturation, dormancy, storage, germination, and how these factors relate to seedling growth.	Not Covered	Not Covered		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s)
Soil & Crop Sciences	SOCR 311	Seed Quality	Importance of seed production and genetics to seed quality. The value of seed quality to field crop production.		Yes		Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Module or Unit
Soil & Crop Sciences	SOCR 441	Soil Ecology	An integrative, hands-on experience in the theory and application of ecology principles to the soil environment.		Yes					Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast
Soil & Crop Sciences	SOCR 400	Soils and Global Change	Foundations on the science of global change and its impact on soil processes and biota.		Yes					Lecture(s), Discussion/Recitation
Soil & Crop Sciences	SOCR 424	Topics in Organic Agriculture	Examination of issues specific to organic food production systems and marketing.	Yes		Yes				
Soil & Crop Sciences	SOCR 498	Undergraduate Research	Research in soil and crop sciences.	Yes						Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Statistics	STAT 498	Research in Statistics	Research skills and techniques; includes both oral and written communication of results.		Yes					Other (please describe): Research Project
Statistics	STAT 341	Statistical Data Analysis I	Estimation and inference based upon Gaussian linear regression models; residual analysis; variable selection; non-linear regression.		Yes		Yes			Assignments(s)/Graded Deliverable(s), Discussion/Recitation

Vetrinary & Biomedical Sciences	VMBS 100	Introduction Biomedical Sciences Major	Introduction to biomedical sciences major and faculty; academic and career planning; information sources in biomedical sciences.				Yes			
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Graduate Sustainability-Focused Courses										
Department	Course #	Course Name	Course Description	Environmental Focused	Environmental Inclusive	Social Focused	Social Inclusive	Economic Focused	Economic Inclusive	How Sustainability is Integrated
Ecosystem Science & Sustainability	ESS 501	Principles of Ecosystems Sustainability	Principles of ecosystem sustainability and threats to sustainability. Students will investigate and develop case studies.	Yes		Yes			Yes	Lecture(s), Guest speaker(s), Assignments(s)/ Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation, Service Learning/Community Service, Other (please describe): Projects with community partners
Ecosystem Science & Sustainability	ESS 505	International Climate Negotiations	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 issues/policies through a research project, and have the opportunity to prepare for actual climate action negotiations.	Yes		Yes		Yes		
Ecosystem Science & Sustainability	ESS 524	Foundations for Carbon/GHG Management	Foundations for understanding greenhouse gas emissions management and accounting.	Yes		Yes		Yes		
Ecosystem Science & Sustainability	ESS 542	Greenhouse Gas Policies	Rules, regulations and standards for greenhouse gas management and accounting.	Yes		Yes		Yes		
Ecosystem Science & Sustainability	ESS 543	Global Climate Change	Climate change science, climate change impacts, and climate change mitigation, including discussions of current topics in climate change.	Yes		Yes				
Ecosystem Science & Sustainability	ESS 545	Applications in Greenhouse Gas Inventories	Overview of methods for estimating greenhouse gas emissions and mitigation potential for agriculture and forestry activities.	Yes		Yes		Yes		
Ecosystem Science & Sustainability	ESS 554	Ecological and Social Agent-based Modeling	Exploring the use and making of agent-based models featuring interacting individuals in ecological and social simulation, with examples and projects.	Yes		Yes		Yes		
Ecosystem Science & Sustainability	ESS 555	Life Cycle Assessment	The quantitative and qualitative measure of cradle-to-grave impacts of products and services on the environment, the economy, and society.	Yes						Lecture(s), Guest speaker(s), Readings/Video/Podcast, Lab(s)
School of Global Environmental Sustainability	GES 520	Issues Global Environmental Sustainability	Analysis of the different major dimensions/definitions of sustainability in current issues involving environmental, social and economic systems.	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 528	Assessing the Food, Energy, Water Nexus	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 challenges. Introduction to tools that enhance systems-level thinking and problem solving.	Yes		Yes		Yes		
Accounting	ACT 541	Forensic and Fraud Auditing	Professional practices for addressing the related areas of forensic accounting and fraud.	Yes		Yes		Yes		Lecture(s), Guest speaker(s), Assignments(s)/ Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Accounting	ACT 605	Accounting for Sustainable Enterprises	A survey of financial, managerial, and sustainability accounting systems and reports.		Yes	Yes		Yes		

Agricultural & Resource Economics	AREC 507	Applied Welfare & Policy Analysis	How policies are crafted to effectively address social issues, especially for agriculture and the environment, and how they impact society.		Yes	Yes		Yes		
Agricultural & Resource Economics	AREC 540	Environmental & Natural Resources Economics	Theory, methods, and policy in environmental and natural resource economics.	Yes			Yes	Yes		Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast
Agricultural & Resource Economics	AREC 572	Social Benefit Cost Analysis	Theory, application of concepts relating to social benefit cost analysis of public projects, policies intended to promote social welfare, and economic growth.	Yes		Yes		Yes		Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Agricultural & Resource Economics	AREC 740	Advanced Natural Resource Economics	Advanced theory, methods, and literature in natural resource economics, including dynamic programming and optimal control.	Yes			Yes	Yes		Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s)
Agricultural Biology	BSPM 551	Advanced Integrated Pest Management	Concepts of integrated pest management and the strategies and tactics employed in the practical application of these concepts.	Yes		Yes		Yes		Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
Animal Sciences	ANEQ 555	Life Cycle Assessment for Sustainability	The quantitative and qualitative measure of cradle-to-grave impacts of products and services on the environment, the economy, and society.	Yes			Yes	Yes		
Anthropology & Geography	ANTH 530	Human-Environment Interactions	Paradigms and concepts in ecological anthropology with an emphasis on adaptation and resilience.		Yes	Yes				Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit, Discussion/Recitation
Anthropology & Geography	ANTH 571	Anthropology and Global Health	Global health concerns and problems including poverty, urbanization, malnutrition, diet, war and refugees, climate, and environment.	Yes		Yes				
Anthropology & Geography	ANTH 617	Place, Space and Adaptation	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 relationships in place-based contexts.	Yes		Yes				
Anthropology & Geography	ANTH 554	Ecological and Social Agent-based Modeling	Exploring the use and making of agent-based models featuring interacting individuals in ecological and social simulation, with examples and projects.	Yes		Yes				
Anthropology & Geography	ANTH 571	Anthropology & Global Health	Global health concerns and problems including poverty, urbanization, malnutrition, diet, war and refugees, climate, and environment.	Yes		Yes				
Anthropology & Geography	ANTH 617	Place, Space & Adaptation	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 relationships in place-based contexts.	Yes		Yes		Yes		

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.
Art & Art History	ART 521	Art and Environment	Interdisciplinary studio/seminar course investigating art's relationship to the environment through readings, field trips, presentations and studio practice.	Yes		Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community 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			
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/Recitation
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 Engineering	CIVE 525	Water Engineering International Development	Planning and design of small-scale and low-cost water supply and wastewater systems for rural communities in developing countries.	Yes		Yes		Yes	
Civil & Environmental Engineering	CIVE 527	Tools for FEW Systems Analysis	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 analysis, and multi-criteria decision analysis.	Yes		Yes		Yes	

Civil & Environmental Engineering	CIVE 528	Assessing the FEW Nexus	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 challenges. Introduction to tools that enhance systems-level thinking and problem solving.	Yes		Yes		Yes	
Civil & Environmental Engineering	CIVE 530	Environmental Engr at the Water-Energy-Health Nexus	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 nanotechnology) that prevent water-borne diseases beyond conventional disinfection.	Yes		Yes			
College of Agricultural Sciences	AGRI 510	Sustainable Agriculture	An interdisciplinary study comparing conventional and alternative land management practices, using an agroecosystem analysis approach.	Yes		Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation
College of Agricultural Sciences	AGRI 515	Urban Horticulture	Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment.	Yes		Yes			
College of Agricultural Sciences	AGRI 632	Managing for Ecosystem Sustainability	Impacts of ecological processes, use of mechanism-based understanding, and tools used to manage the ecosystem for sustainability.	Yes		Yes			
College of Business	BUS 634	Sustainable Venturing	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 sectors.	Yes		Yes		Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Module or Unit
College of Business	BUS 636	Economics of Ecosystems & Biodiversity	Economic theories and analytical frameworks are developed and applied to the use, protection, and management of the natural environment.	Yes				Yes	
College of Engineering	ENGR 531	Engineering Risk Analysis	Estimation and risk identification, development of mitigation techniques.	Yes				Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Module or Unit
College of Engineering	ENGR 555	Life Cycle Assessment	The quantitative and qualitative measure of cradle-to-grave impacts of products and services on the environment, the economy, and society.	Yes					Lecture(s), Guest speaker(s), Readings/Video/Podcast, Lab(s)
Colorado School of Public Health	PBHL 530	Environmental Public Health & Policy	Major concepts, methodologies and issues in the field of environmental public health.	Yes		Yes			
Economics	ECON 740	Advanced Natural Resource Economics	Advanced theory, methods, and literature in natural resource economics, including dynamic programming and optimal control.	Yes			Yes	Yes	Lecture(s), Guest speaker(s), Assignments(s)/Graded Deliverable(s)
Economics	ECON 741	Advanced Environmental Economics	Advanced theory, methods, and literature in environmental economics.	Yes				Yes	
Economics	ECON 771	Political Economics: Race, Gender	Economic approaches to inequality based on race/ethnicity, gender, and class.			Yes		Yes	Lecture(s), Assignments(s)/Graded Deliverable(s), Readings/Video/Podcast, Discussion/Recitation

English	E 605	Critical Reading and Writing	Examination of the social and political contexts of reading and writing policy and instruction.	Yes		Yes			Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
English	E 632	Professional Concerns-English	Professional concerns of secondary school teachers of English.		Yes	Yes			Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
English	E 633	Specific Topics-Writing/Rhetoric	Varied topics covering social, political, cultural or historical areas, or literacy and rhetorical theory and practice, or professional and pedagogical issues.	Yes		Yes			Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Environmental & Radiological Health Sciences	ERHS 520	Environmental & Occupational Health	Issues in environmental and occupational health sciences in the context of public health and regulatory concerns.	Yes		Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Environmental & Radiological Health Sciences	ERHS 570	Radioecology	Environmental transport and exposure assessment of radioactive and other contaminants; estimating risk for human health and ecological impacts.	Yes		Yes				
Forest & Rangeland Stewardship	NR 541	Conservation Governance	Overview of conservation governance issues at the local, national, and international levels.	Yes		Yes				
Forest & Rangeland Stewardship	NR 545B	Multilevel Views: Society & Conservation	Myriad and often opposing views of societal and environmental problems across cultures and across scales.	Yes		Yes				
Forest & Rangeland Stewardship	NR 562	Ecosystem Services in a Changing World	Understanding of ecosystem services and global change.	Yes		Yes		Yes		
Forest & Rangeland Stewardship	NR 564	Systems Thinking & Biodiversity	Social-ecological systems and the implication of social-ecological systems thinking for biological diversity conservation efforts.	Yes		Yes				
Forest & Rangeland Stewardship	NR 578	Ecology of Disturbed Lands	Analysis of basic and applied ecological principles involved in the restoration of drastically disturbed lands.	Yes		Yes				
Forest & Rangeland Stewardship	NR 678	Advanced Ecological Restoration	Analysis of environmental factors influencing restoration of disturbed lands and practices for successful restoration of disturbed ecosystems.	Yes			Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation,Service Learning/Community Service
Horticulture & Landscape Architecture	HORT 511	Green Roof Culture	Understand the relevance of green roofs in North America, especially the process, from concept to project completion and maintenance.	Yes		Yes				
Horticulture & Landscape Architecture	HORT 515	Urban Horticulture	Investigate and evaluate the techniques of incorporating food production systems in the urban and peri-urban environment.	Yes		Yes				
Horticulture & Landscape Architecture	HORT 521	Horticulture and Human Health	Impact of principles and practices of horticulture on human health and well-being.	Yes		Yes				
Horticulture & Landscape Architecture	HORT 523	Crop Screening for Health	Principle and methods of screening food crops for traits related to human health.	Yes		Yes				
Horticulture & Landscape Architecture	HORT 522	Horticulture and Health Issues	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. Overcome the barriers that divide horticulture and human health professionals.	Yes		Yes				

Horticulture & Landscape Architecture	HORT 524	Food Pharmacology, Horticulture, and Health	Application of the principles of pharmacology to the production of food combinations that promote human health. Horticultural food crops are emphasized.	Yes		Yes				
Human Dimensions of Natural Resources	NRRT 615	Sustainable Tourism	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 power, and socio-environmental responsibility – will be covered from a systems thinking perspective.	Yes		Yes		Yes		Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service
Management	MGT 663	Strategic Oppsition Impact Enterprise	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 economy. Introduce sustainability practices used by corporations and new ventures.	Yes		Yes		Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit
Management	MGT 667	Global Social Sustainability Entrepreneurship	Global challenges--poverty, environmental degradation, public health, agriculture. Role of entrepreneurial management in private and public sector.	Yes		Yes		Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Management	MGT 668	New Venture Development Social Entrepreneurship	Early stages of a new venture, including creation of business plan. Additional study of social entrepreneurship and sustainable business strategies.	Yes		Yes		Yes		Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit
Marketing	MKT 601	Marketing for Social Sustainability Entrepreneurship	Customer and stakeholder value creation and capture. Marketing strategy with emphasis on social sustainable organizations.		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
Marketing	MKT 664	Design Thinking for Sustainable Enterprise	Guides students in generating sustainable products, services, and business models. Topics build on a foundational understanding of markets and strategies that address triple bottom line imperatives. Emphasizes applying design thinking tools, cross-disciplinary insights, qualitative research, low-fidelity prototyping, and experimentation.		Yes	Yes		Yes		



Mechanical Engineering	MECH 516	Life Cycle Model Technology-Economics	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 economic feasibility and life cycle impacts.	Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Philosophy	PHIL 565	Seminar-Environmental Philosophy	Aesthetic appreciation of nature, duties concerning fauna, flora, endangered species, ecosystem.	Yes		Yes		Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Political Science	POLS 532	Governance-World Political Economics	Theoretical and practical debates on the organization and governance of the world political economy.			Yes		Yes	
Political Science	POLS 541	Political Economy of Change & Development	Responses of the state and its institutions to political, economic, and social change.			Yes		Yes	
Political 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
Political Science	POLS 739	International Environmental Politics	Theories and methodologies used in analyzing international environmental politics and policy.	Yes		Yes			
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	
Sociology	SOC 564	Environmental Justice	Unequal distribution of environmental risks, benefits, policies, and regulatory practices across different populations.	Yes		Yes			
Sociology	SOC 667	State, Economy, and Society	Major classical and contemporary sociological theories of state-economy-society relations emphasizing development.	Yes			Yes	Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Sociology	SOC 668	Environmental Sociology	Connections between social organizations, the environment, and science and technology.	Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation

Graduate Sustainability-Inclusive Courses										
Department	Course #	Course Name	Course Description	Environmental Focused	Environmental Inclusive	Social Focused	Social Inclusive	Economic Focused	Economic Inclusive	How Sustainability is Integrated
Ecosystem Science & Sustainability	ESS 580A7	Environmental Data Science	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 approaches like: linear models, trend analysis, simple machine learning techniques.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Ecosystem Science & Sustainability	ESS 580A9	Environmental Data Science: Water Resources	Focus on analyzing and understanding water resources. Examine key innovations in deep learning for hydrological prediction and model parameterization, with a focus on cutting-edge techniques and hands-on analyses.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Ecosystem Science & Sustainability	ESS 660	Biogeochemical Cycling in Ecosystems	Biotic and abiotic processes responsible for distribution and fluxes of elements at ecosystem, landscape, and global scales.	Yes			Yes			
Ecosystem Science & Sustainability	WR 511	Water Resource Development	Basic principles of water resource management including surface and subsurface flows.		Yes					Lecture(s),Readings/Video/Podcast
Ecosystem Science & Sustainability	WR 512	Water Law for Non-Lawyers	Basics of water law and policy for Colorado, western states, and the U.S.		Yes		Yes			Lecture(s)
School of Global Environmental Sustainability	GES 542	Biobased Products	Science and engineering aspects of biobased fuel, energy, and chemical production, including plant biology, thermochemical conversion, biomass deconstruction, fermentation, and biofuel properties. Aspects of sustainable production and economics will be discussed.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Accounting	ACT 612	Issues Finance/Reporting & Auditing	Contemporary and emerging issues at the intersection of financial reporting and auditing.						Yes	Lecture(s)
Agricultural & Resource Economics	AREC 542	Applied Advanced Water Resource Economics	Theory and application of economics in water resource planning.		Yes		Yes	Yes		
Agricultural & Resource Economics	AREC 570	Methodology-Economic Research	Philosophical foundations of science and research. Concepts and skills for planning, performing, reporting, and evaluating economic research.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s)
Agricultural & Resource Economics	AREC 605	Agricultural Production	Empirical application and analysis of production and cost issues in the agricultural and natural resource sectors.		Yes		Yes		Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Agricultural & Resource Economics	AREC 615	Optimization Methods for Economics	Theory and practice of optimization techniques used in economic applications with emphasis on linear and nonlinear programming.		Yes		Yes	Yes		Lecture(s),Assignments(s)/Graded Deliverable(s)
Agricultural Biology	AB 554	Fungal Plant Pathogens	Introduction to fungal biology, including ecology, physiology, genetics and diversity of fungal pathogens. Explore fungal lifecycles, modes and genetics of fungal mating and sources of genomic variation, and fungal pathogenesis.		Yes				Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Agricultural Biology	BSPM 500	Foundations Bioagriculture Sciences	Introduction to graduate school covering managing time, advisor and research, plus a survey of topics encompassed by the department of BSPM.		Yes		Yes			Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Agricultural Biology	BSPM 550	Molecular Plant-Microbe Interactions	Principles of plant-microbe interactions, physiological and molecular aspects of plant defense, genomic approaches to study plant defense.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast

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

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

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

College of Engineering	MSE 502D	Materials Spectroscopy	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 dispersive spectroscopy for materials research.		Yes					Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
College of Engineering	SYSE 512	Sensing and Imaging Analysis	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 science, biometrics, and signal/image characterization.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
College of Engineering	SYSE 567	Systems Engineering Architecture	Observation/classification of systems architecture. Systems architecture principles and critical evaluation through design studies.		Yes		Yes			Lecture(s)
College of Engineering	SYSE 580A1	Control Engineering for SE	Challenge-driven overview of the diversity of control paradigms for modern, dynamic engineering systems for realizing desired system behaviors. Topics include linear, nonlinear, optimal, robust, decentralized, and hierarchical control methods. Examples from aero-actuation, space, energy, thermal, chemical, and financial systems are presented.						Yes	Lecture(s)
College of Liberal Arts	PPA 560	City Management	Administrative functions, organization, politics, and problems associated with city government. In-depth study of the administrative management of US cities.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Service Learning/Community Service
College of Liberal Arts	PPA 660	Theories of the Policy Process	Recent developments in public policy.		Yes		Yes		Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
College of Liberal Arts	PPA 665	Public Policy Analysis	The practice of policy analysis and the tools used to conduct an analysis including: forecasting, cost benefit analysis, cost effectiveness analysis, and policy design.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation,Service Learning/Community Service
College of Natural Sciences	NSCI 575	Big Data Ethics	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-centric research within or outside academia.		Yes		Yes			Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Colorado School of Public Health	PBHL 534	Data Management Using SAS	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, recoding, reformatting, subsetting, and merging data), and perform data analysis and write reports.		Yes		Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Lab(s)
Colorado School of Public Health	PBHL 550	Applied Social Community Health Factors	Explore the social, behavioral, and cultural factors that affect the health of individuals and populations and, thus, contribute to health inequities. Investigate topics such as structural bias, racism and social inequities that impact community health. Examine development, implementation and evaluation of programs and policies to promote and sustain healthy communities.						Yes	

Colorado School of Public Health	PBHL 570	Epidemiology for Public Health	Descriptive and analytic methods in epidemiology and their application to research and practice in the field of public health.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Colorado School of Public Health	PBHL 575	Epidemiological Research	Concepts, principles and skills needed for conducting epidemiological research in public health.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Lab(s),Discussion/Recitation,Service Learning/Community Service
Communication Studies	SPCM 508	Deliberative Theory & Practice	Survey of current theory and practice connected to deliberative democracy.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Module or Unit,Discussion/Recitation
Communication Studies	SPCM 538	Relating & Organizing for Health	Organizational, interpersonal, and intercultural dimensions of communicating in health care organizations.			Yes				
Communication Studies	SPCM 792A	Rhetoric and Civic Engagement	Advanced readings in particular themes, questions, and topics pertaining to rhetoric and/or civic engagement.		Yes	Yes			Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Communication Studies	SPCM 793	Advanced Communication Research Methods	Advanced research method(s) in the field of Communication Studies.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Computer Information Systems	CIS 606	Application Software Infrastructure	Design, construction, and testing of business application software infrastructure including hardware, operating software, and communications network.		Yes				Yes	Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Computer Science	CS 530	Fault-Tolerant Computing	Achieving high reliability and fault tolerance. Fault modeling, testing, reliability evaluation, redundancy, fault tolerance. (NT-O)		Yes		Yes		Yes	Lecture(s),Lab(s)
Design & Merchandising	DM 510	Consumer Behavior	Evaluation of psychological, sociological, and cultural theories of consumer behavior through examination of factors that influence decision making.		Yes		Yes			Lecture(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Design & Merchandising	DM 542	Advanced Computer-Aided Textile Design	Use of computer-aided design system to produce fabric designs for apparel or interior professional end use.		Yes		Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Other (please describe): Cultural Appropriation in textile design fil research project
Design & Merchandising	IDEA 510	Design Thinking Processes	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 manage ill-defined societal problems, and communicate with diverse stakeholders and team members.		Yes	Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service
Economics	ECON 520	Public Economics I	Analysis and evaluation of tax policy in terms of efficiency and equity.				Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Economics	ECON 530	Methodology-Economic Research	Philosophical foundations of science and research. Concepts and skills for planning, performing, reporting, and evaluating economic research.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s)
Economics	ECON 663	Urban and Regional Modeling	Methodological approaches in regional economics: general equilibrium, input-output, computable general equilibrium models; social accounting matrices.		Yes		Yes		Yes	Lecture(s),Module or Unit
Economics	ECON 760	Theories-Economic Development	Analysis of fundamentals of economic development (processes, problems, and strategies) with special reference to developing nations.				Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Economics	ECON 640	International Trade Theory	Theory of international trade including comparative advantage, factor growth, market distortions, and commercial policy.		Yes		Yes	Yes		Lecture(s),Readings/Video/Podcast,Discussion/Recitation

Economics	ECON 540	Environmental & Natural Resource Economics	Theory, methods, and policy in environmental and natural resource economics.	Yes			Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
English	E 503	Investigating Literacies	Research methods and ethical issues in classroom-based inquiry into oral and written literacy practices.				Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
English	E 513C	Form & Technique -Modern Literature: Essay	Selected readings in and discussions of modern literature and criticism from the writer's point of view with emphasis on form and technique.				Yes			Readings/Video/Podcast
English	E 643	Craft Approaches to Literature	A seminar-based class combining creative and craft-based experiments with traditional literary critical approaches to various topics utilizing poetry, fiction, creative non-fiction, and other alternate hybrid genres.		Yes		Yes		Yes	Discussion/Recitation
Environmental & Radiological Health Sciences	ERHS 501	Biological Basis Public Health	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 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.		Yes		Yes			Lecture(s)
Environmental & Radiological Health Sciences	ERHS 510	Cancer Biology	Cancer biology will address each of the hallmarks of cancer, including sustained proliferative signaling, evasion 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 prevention of cancer.		Yes		Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation,Other (please describe): Since this is a course in Cancer Biology, at various points in the course pathogens which increase the incidence of cancer are covered, this includes, but is not limited to chemical pollutants in the environment and food, viruses, and radioactive materials.
Environmental & Radiological Health Sciences	ERHS 527	Industrial Hygiene Laboratory	Industrial hygiene field monitoring equipment and techniques.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Lab(s)
Environmental & Radiological Health Sciences	ERHS 530	Radiological Physics & Dosimetry I	Theory and detection of ionizing radiation; measurement and calculation of exposure and dose.		Yes		Yes			Lecture(s)
Environmental & Radiological Health Sciences	ERHS 549	Environmental Health Risk Assessment	Environmental contamination and health effects of chemicals using risk assessment, management and communication approaches	Yes			Yes			
Environmental & Radiological Health Sciences	ERHS 551B	Radiation Oncology Principles	Application of basic radiation biology to the clinical application of radiation therapy. Radiation sensitivity and tolerance is evaluated based on normal tissue architecture and kinetics. The mechanisms of acute and late radiation effects are elucidated. The impact of time, dose, and fractionation on tumor control and radiation effects are clarified and related to established and newer treatment modalities, including combination therapies and emerging technologies.		Yes		Yes		Yes	Lecture(s),Guest speaker(s)



Environmental & Radiological Health Sciences	ERHS 560	Health Impact Assessment	Application of a Health Impact Assessment approach to systematically judge the potential health effects of a policy or project and the distribution of those effects within the population.		Yes		Yes			Lecture(s),Lab(s)
Environmental & Radiological Health Sciences	ERHS 573	Design and Conduct of Research	Design and implement an epidemiologic study from the development of a research question and study design through data analysis and dissemination.				Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Environmental & Radiological Health Sciences	ERHS 638	Geospatial Environmental Health	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 sociodemographics. Methodological topics covered include geostatistical models, downscaling, predictive modeling, and machine learning.	Yes			Yes	Yes		Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Lab(s)
Environmental & Radiological Health Sciences	ERHS 561	Radiation Public Health	Aspects of radiation public health for students in health physics with emphasis on contemporary issues in radiation protection.	Yes			Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s)
Environmental & Radiological Health Sciences	ERHS 656	Occupational Noise Control	Measurement and control of industrial or environmental noise emphasizing practical solutions.			Yes				Lecture(s),Assignments(s)/Graded Deliverable(s),Service Learning/Community Service
Environmental & Radiological Health Sciences	ERHS 637	Environment, Safety, Health, Management	Environment, safety, and health management systems for occupational health practitioners; major environmental and DOT regulatory standards and laws.		Yes	Yes				Lecture(s),Assignments(s)/Graded Deliverable(s),Service Learning/Community Service
Environmental & Radiological Health Sciences	ERHS 504	Occupational/Environmental Toxicology	Toxic effects of harmful agents found in occupational and environmental settings.		Yes	Yes				Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Finance & Real Estate	FIN 655	Investments	Investment analysis and decision making emphasizing equity securities and portfolio management		Yes		Yes		Yes	Other (please describe): An ESG investments module will be introduced in Fall of 2022.
Finance & Real Estate	FIN 661	Advanced Portfolio Management	Portfolio management, asset allocation, and asset selection theory and techniques.		Yes		Yes		Yes	Lecture(s),Discussion/Recitation
Finance & Real Estate	FIN 665	Derivative Securities Analysis	Using futures, options, swaps, and securitized transactions in financial management.		Yes		Yes		Yes	Lecture(s),Discussion/Recitation
Finance & Real Estate	FIN 669	Financing, Evaluating Sustainable Enterprise	Theoretical and applied approaches to the funding and evaluation of enterprises.		Yes		Yes	Yes		
Fish, Wildlife & Conservation Biology	FW 544	Ecotoxicology	Ecological effects of contaminants on populations, communities, and ecosystems.	Yes			Yes			
Fish, Wildlife & Conservation Biology	FW 553	Adaptive Management	Formal approaches to making management decisions about wildlife and fish populations, using tools of decision analysis.	Yes			Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Lab(s),Discussion/Recitation
Food Science & Human Nutrition	FTEC 574	Current Issues in Food Safety	Current food safety issues from field to table; microbiological, consumer, processing, and agricultural issues.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Discussion/Recitation
Forest & Rangeland Stewardship	F 610	Advanced Forest Ecology	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 of climate variability on forest ecosystems of the southern Rocky Mountains and globally.	Yes			Yes			
Forest & Rangeland Stewardship	F 624	Fire Ecology	Fire in forest and range ecosystems; principles and techniques for evaluating fire effects on vegetation, soils, watersheds, and wildlife.	Yes			Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation

Forest & Rangeland Stewardship	NR 538	Skills in Ranch Management	Learn and practice a variety of skills needed to manage western ranches through experiential learning.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Lab(s),Service Learning/Community Service
Forest & Rangeland Stewardship	NR 543B	Catalyzing Change: Collaborative Conservation	Collaborative communication theories, methods and tools to effectively create change in the field of conservation.		Yes	Yes				
Forest & Rangeland Stewardship	NR 567	Analysis of Environmental Impacts	Preparation and evaluation of environmental impact statements under NEPA.	Yes			Yes			
Forest & Rangeland Stewardship	NR 625	Community-Based Natural Resource Management	History, theory, practice, and evaluation of community-based natural resource management.		Yes		Yes		Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Forest & Rangeland Stewardship	RS 532	Range Ecosystem Sampling	Measurement, analysis techniques for rangeland vegetation. Applications to management emphasized.		Yes				Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Module or Unit,Lab(s),Discussion/Recitation,Service Learning/Community Service
Geosciences	GEOL 547	Ore Deposit Geochemistry	Geochemical techniques applied to the geology, exploration, and environmental analysis of ore deposits.		Yes					Lecture(s),Assignments(s)/Graded Deliverable(s)
Geosciences	GEOL 551	Groundwater Modeling	Groundwater modeling from a geologic perspective. Conceptual models and computer modeling of groundwater flow and solute transport.		Yes					Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Geosciences	GEOL 552	Advanced Topics-Hydrogeology	Current literature, new techniques, legislative and political developments in hydrogeology, and appropriate case histories.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Geosciences	GEOL 554	Remote Sensing of the Earth	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 questions focused on the Earth system.		Yes					Lecture(s),Assignments(s)/Graded Deliverable(s),Lab(s)
Geosciences	GEOL 570	Plate Tectonics	Examination of the historical development of plate tectonic theory and its application to understanding geological processes.		Yes				Yes	Lecture(s),Discussion/Recitation
Geosciences	GEOL 580A9	The Earth's Interior	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 state.		Yes				Yes	Lecture(s),Discussion/Recitation
Geosciences	GEOL 580B1	Paleoclimate	A survey of past climate and Earth system states, from the Archean to the Holocene. Special emphasis on extreme climates (pre-oxygenated atmosphere, Snowball Earth, and super greenhouse climates), Pleistocene glacial-interglacial cycles, and on time periods where there remains substantial model-data disagreement (early Eocene, Heinrich events). Role of paleoclimate in understanding future warming and evolution of the Earth system.		Yes					Lecture(s),Discussion/Recitation
Geosciences	GEOL 652	Fluvial Geomorphology	Geomorphology of channels, slopes, and drainage systems.		Yes					Lecture(s),Readings/Video/Podcast

Geosciences	GEOL 662	Field Geomorphology	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 critically evaluate relevant literature.		Yes					Lecture(s),Other (please describe): Field trip to landslide hazard site
Graduate School	ECOL 505	Foundations of Ecology	Overview of the science of ecology; what questions are asked, how they are answered.		Yes					Lecture(s),Guest speaker(s),Readings/Video/Podcast,Discussion/Recitation
Graduate School	ECOL 600	Community Ecology	Current theories and tests of the dynamics and regulation of plant and animal communities.		Yes					Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Graduate School	ECOL 610	Ecosystem Ecology	Concepts, methods, issues in ecosystem science: energy and matter cycling; systems perspectives, simulation modeling, sustainability, global change.	Yes						Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Module or Unit,Discussion/Recitation
Graduate School	GRAD 530	Introduction to Graduate Research	Develop 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. Prepare students for advanced courses that support them in research communications within their discipline.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Graduate School	GRAD 540	Graduate Research Communication	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 courses that support research communications within disciplines.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
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
Graduate School	GRAD 575	Big Data Ethics	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-centric research within or outside academia.		Yes		Yes			Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Graduate School	GRAD 580A2	Graduate Research Skills	Develop the skills to effectively participate in graduate work (both orally and in writing) and learn how to successfully function in academic discourse communities.				Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Health & Exercise Science	HES 500	Environmental Exercise Physiology	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 atmosphere, hypobaric atmosphere, pollution, and sleep deprivation.		Yes	Yes				
History	HIST 503	Historical Method-Preservation	Historiographical skills and methods; emphasis on theory and practice of historic preservation.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation,Service Learning/Community Service
History	HIST 505	Digital History	Historiographical skills and methods; emphasis on theory and practice of digital history.		Yes					Assignments(s)/Graded Deliverable(s)
History	HIST 539	World Environmental History	Major works in the field of world environmental history and the major historiographical debates.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation

History	HIST 611	Research Seminar-United States	Research in United States history.		Yes		Yes		Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Human Development & Family Studies	HDFS 520	Family Therapy: Treatment Plan	Integration of family/couple therapy theories and practice related to treatment planning and internal family systems therapy.				Yes		Yes	Assignments(s)/Graded Deliverable(s)
Human Development & Family Studies	HDFS 521	Family Therapy: Common Factors	Application of common factors - e.g., therapeutic alliance - in family and couple therapy.				Yes		Yes	Assignments(s)/Graded Deliverable(s)
Human Development & Family Studies	HDFS 534	Marriage and Family Therapy	Theories and techniques.				Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Human Development & Family Studies	HDFS 620	Family Therapy: Addictions	Application of marriage and family therapy theories to clinical practice with a focus on addiction and self-of-the-therapist.				Yes		Yes	Service Learning/Community Service
Human Development & Family Studies	HDFS 621	Family Therapy: Topics-Sexuality	Integration of family therapy theories and practice related to topics in sexuality, termination and referral, and one's personal theory of change.				Yes		Yes	Assignments(s)/Graded Deliverable(s)
Human Development & Family Studies	HDFS 677	Ethical and Legal Issues	Ethical and legal issues in field of human development and family studies.				Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Human Development & Family Studies	HDFS 710	Theories Applied Developmental Science	Theories of applied developmental science, and implications for intervention and policy.				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 792A	Seminar: Lifespan Socioemotional Development	Current issues in applied developmental science involving a synthesis of theory, research, and application.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Human Development & Family Studies	HDFS 610	Risk and Resilience	Factors influencing risk for poor developmental outcomes and resilience despite risks or adversities. Risk and resilience are presented as developmental processes influenced by ecological factors residing in families, schools, and neighborhoods.			Yes			Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation,Service Learning/Community Service
Human Dimensions of Natural Resources	NRRT 531	Adventure Tourism Enterprise	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 the fundamentals of how to develop an adventure tourism concept and turn it into a successful business.		Yes		Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Human Dimensions of Natural Resources	NRRT 600	Tourism Practices	Fundamental tourism theories and concepts that lay the groundwork for understanding tourists and the tourism industry. Based on the interdisciplinary nature of tourism studies, covers the broad range of fundamental theories and interrelated concepts that guide decision-making in the tourism industry. Focuses on several key themes aimed to capture the primary areas of conceptual thinking and analysis in contemporary tourism.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
Human Dimensions of Natural Resources	NRRT 625	Tourism and Conflict	Managerial communication skills and negotiation tools and their implications for effective organizational communication and management of potential conflicts faced by managers in the tourism industry.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit
Human Dimensions of Natural Resources	NRRT 679A	Current Topics: Tourism	Current topics in nature-based travel and tourism.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Service Learning/Community Service
Journalism & Media Communications	JTC 662	Communicating Science & Technology	Examination of theoretical and empirical studies concerning communication of science and technology subject matter.		Yes		Yes			Lecture(s),Readings/Video/Podcast,Module or Unit

Languages, Literatures, & Cultures	LSPA 553	Advanced Author Studies-Spanish	Critical approaches to the study of selected authors through appreciation and analysis of their major works.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s)
Languages, Literatures, & Cultures	LSPA 554	Advanced Topic Studies-Spanish	Selected topics (theme, topoi, and interdisciplinary subjects) in Spanish literature.				Yes			Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Management	MGT 665	Supply Chain Development and Management	This course teaches the development and management of the global supply chain that plans, sources, makes and delivers an organization's products.		Yes		Yes		Yes	Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Module or Unit
Mathematics	MATH 540	Dynamical Systems	Linear and nonlinear systems, orbits, phase space, flows of vector fields, stability, bifurcation theory, chaos, strange attractors and applications.				Yes		Yes	Guest speaker(s),Discussion/Recitation
Mathematics	MATH 676	Topics in Mathematics	Advanced study experiences which deal with established content areas in mathematics.		Yes					Guest speaker(s)
Mechanical Engineering	MECH 580B	Orbital Mechanics	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 intuitive understanding of orbital maneuvers.		Yes					Lecture(s),Readings/Video/Podcast
Mechanical Engineering	MECH 580B	Trajectory and Performance	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 definition of margins and prediction of mission losses.		Yes					Lecture(s),Readings/Video/Podcast
Mechanical Engineering	MECH 505	Steam Power Plants	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 energy systems are considered.	Yes		Yes				
Mechanical Engineering	MECH 575	Solar and Alternative Energies	Solar radiation, flat-plate collectors, energy storage, space heating and cooling, power generation, applications, simulation.	Yes					Yes	Lecture(s),Assignments(s)/Graded Deliverable(s)
Music, Theatre & Dance	MU 518	Post-Tonal Analytic Techniques	Appropriate techniques for analyzing music from the late 19th century, 20th century, and 21st century.		Yes		Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Music, Theatre & Dance	MU 543	Research Methods/Music Therapy	Research techniques used in quantitative and qualitative methods. Introductory methods used in music therapy and music education research.				Yes		Yes	Lecture(s),Readings/Video/Podcast,Discussion/Recitation
Music, Theatre & Dance	MU 556	Advanced Instrumental Conducting & Technology	Score reading and analysis, preparation of instrumental scores for performance; expressive baton techniques, rehearsal methods and procedures.				Yes			Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Music, Theatre & Dance	MU 648	Neuroscience and Music	Historical and scientific foundations of neurologic music therapy.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Music, Theatre & Dance	MU 649	Advanced Practice in Music Therapy	Study of advanced music therapy techniques.				Yes		Yes	Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation

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

School of Education	EDCO 500	Career and Employment Concepts	Career and lifestyle studies that provide an understanding of career development, employment concepts, and career counseling resources.				Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
School of Education	EDCO 660	Career Development Counseling	Career development programs and processes over the life span with particular attention to career choice.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
School of Education	EDCO 661	Career and Life Design	Career and life design counseling knowledge, skills, and practices with a focus on emerging career development and career counseling theories, concepts, and models; career programming and evaluation; and career development and counseling advocacy.				Yes			Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation,Service Learning/Community Service
School of Education	EDCO 665	Career Development Institute	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 students to consider educational and labor market trends and career development within a global society.				Yes	Yes		Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
School of Education	EDRM 602	Action Research	Provide educators with knowledge and skills to plan and implement school-based research to improve teaching and learning.				Yes			Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Lab(s),Discussion/Recitation,Service Learning/Community Service
School of Education	EDRM 606	Principles: Quantitative Data Analysis	Quantitative data analysis in social science research; descriptive statistics; fundamentals of inference.				Yes			Lecture(s),Readings/Video/Podcast,Module or Unit,Discussion/Recitation
School of Education	EDRM 663	Reflective Practice I	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 analysis skills are necessary to both conduct autoethnography and develop as a practitioner-scholar.				Yes			Lecture(s),Guest speaker(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
School of Education	EDRM 704	Qualitative Research	Examination of qualitative research theory, methods, and applications to education and the social sciences.				Yes			Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
School of Education	EDCO 675	Mental Health Counseling	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, and treatment and diagnosis of specialty populations.	Yes						
School of Education	EDRM 711	Ethnographic Research	Theoretical underpinnings, research design, ethics and practical application of ethnographic research in a naturalistic setting.			Yes				
School of Education	EDUC 651	Multicultural & Special Populations	Special concerns for working with people of various cultural, ethnic, exceptional, and special interest groups.			Yes				
School of Occupational Therapy	OT 620	Research to Practice I	Critically evaluate qualitative and quantitative research processes pertaining to individuals.				Yes			Assignments(s)/Graded Deliverable(s),Lab(s)
School of Occupational Therapy	OT 636	Adult/Old Age I Lab	Optimizing occupational performance for adults and older adults with attention to roles, satisfaction, competence, and activities.				Yes			Lecture(s),Lab(s),Discussion/Recitation
School of Occupational Therapy	OT 640	Research to Practice II	Critically evaluate qualitative and quantitative research processes pertaining to groups and systems.				Yes			Lab(s),Discussion/Recitation

School of Social Work	SOWK 520	Social Welfare Policy & Advocacy	Analysis of how social welfare policies affect the well-being of people and the tools that can be used to advocate for social change.			Yes			Yes	
School of Social Work	SOWK 530	Anti-Oppressive Social Work Practice	Developing anti-oppressive practice with a focus on multiculturalism and social justice advocacy. Critically evaluate personal traits, attitudes and values regarding diversity and identity formation while exploring theoretical frameworks for understanding oppression. Analyze the relationships among power, privilege and oppression. Acquiring strategies for combating injustice.			Yes				
School of Social Work	SOWK 630	Advance Practice-Individuals	Knowledge, values, and skills to engage, assess, intervene, and evaluate individuals using an advanced generalist practice approach.	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 502	Foundations - Theoretical Sociology	Contributions of major sociological theorists prior to mid-20th century.	Yes			Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Sociology	SOC 562	Food Systems and Agriculture	How agricultural choices generate intended and unintended consequences for human communities and the natural environment.	Yes			Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast,Discussion/Recitation
Sociology	SOCR 740	Plant Molecular Genetics	Advances in study of organization and function of nuclear and organellar genomes, gene expression in higher plants, and plant-microbe interactions.	Yes			Yes		Yes	Lecture(s),Assignments(s)/Graded Deliverable(s),Readings/Video/Podcast
Sociology	SOC 503	Contemporary Sociologic Theory	Contributions of major sociological theorists since mid-20th century.	Yes						
Sociology	SOC 630	Social Stratification	Theory and research on class structure, status attainment, ideology, and social change.	Yes				Yes		
Statistics	STAA 575	Applied Bayesian Statistics	Bayesian analysis of statistical models, prior and posterior distributions, computing methods, interpretation.				Yes	Not Covered	Not Covered	Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Statistics	STAT 540	Data Analysis and Regression	Introduction to multiple regression and data analysis with emphasis on graphics and computing.				Yes	Not Covered	Not Covered	Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Statistics	STAT 547	Statistics for Environmental Monitoring	Applications of statistics in environmental pollution studies involving air, water, or soil monitoring; sampling designs; trend analysis; censored data.							
Statistics	STAT 600	Statistical Computing	Optimization and integration in statistics; Monte Carlo methods; simulation; bootstrapping; density estimation; smoothing.	Yes			Yes	Not Covered	Not Covered	Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Statistics	STAR 513	Regression Models for Research	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 dummy variables,weighted least squares, imputation.	Yes						Lecture(s),Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Statistics	STAR 531	Generalized Regression	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 responses, count data, Poisson and negative binomial regression, log-linear models.	Yes			Yes			Assignments(s)/Graded Deliverable(s),Discussion/Recitation
Statistics	STAT 501	Statistical Science	Overview of statistics theory; use in agriculture, business, environment, engineering; modeling; computing; statisticians as researchers/consultants.	Yes					Yes	



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