

To: Faculty Senate Executive Committee
 From: Lori Ogden, Curriculum Committee Chair
 Date: March 27, 2023
 Re: New Courses Report

Title	College	Credits	Prerequisites	Course Description
CDFS 120: Love, Sex, and Intimate Relationships Across the Lifespan	AHS	3		This course focuses on how we develop intimate relationships including friendships, romantic relationships, and sexual partnerships, including the forms and functions of different types of relationships. Attention is given to how intimate relationships support development, health, and wellness. Students will learn the characteristics of healthy intimate relationships as well as signs of relationship stress and challenge.
CDFS 435: Youth in Society	AHS	3		Students will examine the social institutions that youth can interact with. Attention will be given to determining how well those institutions support youth on their path to adulthood. Students will also explore social policies aimed at enhancing youth development. Finally, the course will also reflect on the critically important ways that youth contribute to society.
ENVE 347: Introduction to Environmental Engineering	CEMR	3	(CHEM 115 and MATH 251) with a minimum grade of C- and PR or CONC: ENVE 347L.	Introduction to key concepts relevant to environmental engineering. Students will apply mass balance principles and reaction kinetics in engineering calculations and design of treatment systems. Additional topics to be covered in this class include water pollution, drinking water and wastewater treatment, air pollution, solid waste management, risk assessment, and environmental regulations.
ENVE 347L: Introduction to Environmental Engineering Laboratory	CEMR	1	(CHEM 115 and MATH 251) with a minimum grade of C- and PR or CONC: ENVE 347.	Introduction to environmental analysis of aqueous systems. The analyses covered are all commonly used for monitoring ambient surface and groundwater conditions, effluent discharges, and the performance of treatment processes.
ENVE 348: Environmental Engineering Processes	CEMR	3	ENVE 347 and ENVE 347L.	Fundamentals of transport phenomena governing the fate of chemical and biological contaminants in environmental systems; introduction to environmental organic chemistry; principles of applied environmental microbiology governing chemical transformations relevant for treatment of waste streams.
ENVE 352: Geoenvironmental Engineering	CEMR	3	MAE 241 and MATH 261 and STAT 215 and CE 201 and (CE 210 or MINE 261) with a minimum grade of C- in all and CE 321 and PR or CONC: ENVE 352L.	This course will introduce the subject of soil mechanics and provide the basic theory and practice of geotechnical and geoenvironmental engineering to all environmental and civil engineering students.
ENVE 352L: Introductory Geoenvironmental Laboratory	CEMR	1	MAE 241 and MATH 261 and STAT 215 and CE 201 and (CE 210 or MINE 261) with a minimum grade of C- in all and CE 321 and PR or CONC: ENVE 352.	The objective of this course is to provide the basic theory and practice of geotechnical and geoenvironmental laboratory soil testing to all environmental and civil engineering students. This course is the hands-on laboratory experience.

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ENVE 441: Water Treatment Principles and Design	CEMR	3	ENVE 348.	This course covers engineering principles and design of water supply and treatment methods, including source water protection, coagulation, flocculation, sedimentation, multimedia filtration, softening, ion exchange, membrane filtration, disinfection, and emerging technologies.
ENVE 443: Decentralized Wastewater Treatment	CEMR	3	ENVE 348.	Principles of decentralized treatment and onsite management of wastewater streams, including site evaluation, alternative collection systems, onsite treatment technologies, land treatment systems, and effluent reuse and disposal.
ENVE 446: Air Pollution and Climate Change	CEMR	3	ENVE 348.	This course covers air pollution issues; regulations; air pollutant characteristics; sources, transport and fate of air pollutants; models for predicting dispersion and air pollutant concentrations; and effects on the environment and human society. Topics also cover climate change science, impacts and case studies.
ENVE 447: Air Pollution Control	CEMR	3	ENVE 348.	Applications of engineering design for air quality control, including control of particulate and gas emissions from stationary sources and mobile sources. Design for indoor air quality and regional air quality control.
ENVE 448: Public Health Engineering	CEMR	3	ENVE 348.	Introduction to environmental human health hazards; fundamental concepts of environmental toxicology, epidemiology, infectious disease microbiology, and risk assessment; engineering applications for control of environmental health hazards.
HIED 757: Education Policy and Politics	AHS	3		The purpose of this course is to explore federal and state-level policy processes in American education, with focus on testing and evaluation at the K-12 level, students' entry into and success in higher education, and funding of both K-12 school districts and higher education institutions. The course covers steps of the policymaking process including federal and state structures, actors, objectives,
HPML 502: U.S. Healthcare Organization and Delivery	SPH	3		This course introduces graduate students to critical concepts in the organization and delivery of healthcare services in the United States.
HRL 510: Recruitment, Assessment, and Selection	B&E	3		This course focuses on theoretical, practical, and legal issues involved in talent acquisitions in organizations. Topics covered include legal compliance, sourcing, selection processes, selection measures, job analysis, and manpower planning.
IMC 550: Influencer Marketing	RCM	3	Students must successfully complete IMC 410 or IMC 610 with at least a C- before taking this course.	This course explores the role of influencer marketing and how best to leverage individual tastemakers to fulfill marketing objectives. Students learn how to identify, qualify, and amplify the efforts of various influencer types available to marketers, and how to set accurate key performance indicators.

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IMC 551: Podcast Production & Promotion	RCM	3	Students must successfully complete IMC 410 or IMC 610 with at least a C- before taking this course.	This course will focus on the essential skills for podcast production and promotion. Students will learn how to record, edit, and publish a professional podcast.
LAW 675: Introduction to the Profession	LAW	1		Law students will engage in reflection about the legal profession, their professional identity, and what essential skills, habits, and traits are needed to succeed in the legal profession.
LAW 681: Cannabis Law	LAW	2		This course will provide a practical approach to hemp and marijuana law. It will provide an opportunity to understand the practice of law from initial client interview, to business creation, through regulatory compliance, banking, taxes and more.
LAW 684: Bill Draft & Leg Process	LAW	2		This course explores the role of lawyers as bill drafters and advocates for legislative solutions to policy problems.
LAW 685: Seminar: Opioid Litigation	LAW	2		Analysis of causes and responses to the nationwide opioid epidemic including applicable laws, regulations; tort litigation strategies of pharmaceutical, federal and state law enforcement; role of the media; and rights and remedies of state/local government and private litigants in Multi-District Opiate Litigation ("MDL").
LAW 686: Civil Procedure	LAW	4		In this course you will study judicial opinions, read rules of civil procedure, and engage in a number of civil procedure exercises. Class discussion will center on these areas.
LAW 745: Artificial Intelligence and the Law	LAW	2		This course will help familiarize law students with the basics of artificial intelligence, including machine learning and algorithmic decision making. Students will study ideas from computer science, data science, and philosophy. Students will learn about the important ways artificial intelligence is being used in the criminal justice sector, difficulties of "arguing" a machine, if algorithms can be biased and more.
LAW 765: ADR: Mediation Training	LAW	1		A practical, skills-based course where students actively participate in the mediation of civil cases in the Monongalia County Magistrate Court as student mediators. The student mediators will coordinate with court personnel to set schedules, work with involved parties to settle cases and explore mediation techniques for mediation sessions. No student mediator will serve as counsel the plaintiff or defendant.
MDIA 231S: Introduction to Game Engine Applications	RCM	1	Restricted to declared majors in Game Design & Interactive Media or Journalism.	This course teaches the fundamentals of creating interactive media using the Unity game engine and C# programming. Students will build several working prototypes by analyzing programming problems to identify and implement the necessary components.

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OEHS 635: Industrial Hygiene Air Sampling and Analysis	SPH	3	OEHS 520 and OEHS 521 or Instructor Consent.	This course exposes students to the basic aspects of developing exposure assessments and impresses upon them their responsibility as health and safety professionals to assemble information and data from the scientific literature and to evaluate that information and data to make professionally and scientifically sound decisions about the potential of or actual exposure to a worker or group of workers.
OEHS 641: OCCUPATIONAL SAFETY AND HEALTH AWARENESS SEMINAR	SPH	1	N/A	This course presents students with practical knowledge on OSHA standards and regulations pertaining to occupational safety and health awareness in the General and Construction Industries.
OEHS 642: EXPOSURE ASSESSMENT SEMINAR	SPH	1	N/A	This course presents students with a systematic description on several vertical and horizontal OSHA standards some applicable by federal OSHA and others by OSHA state programs.
OEHS 643: OSHA STANDARDS SEMINAR	SPH	1	N/A	This course focus primarily on a systematic description of several vertical and horizontal OSHA standards applicable to workplaces covered by federal OSHA or some other OSHA state programs. Each standard is described based on its requirements on written program, medical surveillance, permissible exposure limit/action level if applicable, exposure sampling parameters and frequency and accepted control measures.
OEHS 645: AIR SAMPLING AND ANALYSIS LAB	SPH	1	Pre-Requisites: OEHS 520, OEHS 521, or Instructor Consent	This course exposes students to the basic aspects of conducting exposure assessments. It will teach them their responsibility as health and safety professionals to be able to assemble information and data from the scientific literature and to evaluate that information and data to make professionally and scientifically sound decisions about the potential of or actual exposure to worker(s).
OEHS 647: PHYSICAL HAZARDS MEASUREMENT AND CONTROL LABORATORY	SPH	1	Pre-Requisites: OEHS 520 or OEHS 620 or Instructor's consent Co-Requisites: OEHS 627	This course presents students with applied laboratory practices on the evaluation and control for noise and other physical hazards such as noise ionizing radiation, hand-arm and whole-body vibration, and heat stress.
OEHS 648: INDUSTRIAL VENTILATION AND RESPIRATORY PROTECTION LABORATORY	SPH	1	Pre-Requisites: OEHS 520 or OEHS 620 or Instructor's consent Co-Requisites: OEHS 628 or Instructor's consent	This course presents students with applied laboratory practices on respirator qualitative and quantitative fit testing, as well as on evaluation, commissioning, and troubleshooting of local exhaust ventilation systems.
POLS 336: Energy Policy and Politics	A&S	3		Investigates energy policy and politics from security, political economy, and environmental perspective. Focuses on various types of energy and regions of the world.
PSIO 777: Systems Toxicology: Paracelsus Society	MED	1	Currently enrolled in a PhD program and in good standing.	This course is a monthly meeting to discuss current concepts in toxicology. Examples include, journal club presentations, current events and technological research tools.

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SCFD 605: Educational Research Literacy	AHS	3		This course provides a foundation for graduate students to introduce them to an array of research questions about and research approaches in education, to induct them into ways of framing and pursuing educational research questions, and to orient them to analytically reading and synthesizing published educational research for a variety of methods and theoretical traditions.
SENG 565: Database Design and Implementation	CEMR	3	SENG 520 and SENG 550	Database Design and Implementation is an introduction to designing and implementing databases, using the relational model, for computer applications. Course projects are designed to develop problem solving, engineering skills, and development skills. Project work will be provided to demonstrate database concepts. be added
SENG 660: Engineering Secure Software	CEMR	3	SENG 510 or CS 230	This course teaches the application of fundamental cybersecurity principles to all aspects of the software development process. You will learn to manage the development of software in a way that minimizes vulnerabilities, reduces the impact of the potential exploitation of undiscovered vulnerabilities, and addresses root causes to prevent the recurrence of vulnerabilities.
SUST 201: Earth System Science	A&S	3	PR: SUST 101 and SUST 101L and PR or CONC: SUST 201L	Scientific study of the Earth systems, including hydrosphere, lithosphere, atmosphere, cryosphere and biosphere, and their interactions. Emphasize earth materials, the use of data to predict natural hazards, how exploration and production of natural resources is conducted and the implications for environmental change and sustainability of human civilization.
SUST 201L: Earth System Science Laboratory	A&S	1	PR: SUST 101 and SUST 101L and PR or CONC: SUST 201	Application of methods used by geoscientists to study the earth, including mineral, rock and fossils identification, and data presented in maps, graphs, diagrams and models to interpret the spatial distribution and temporal development of hazards, resources and climate-induced environmental changes.
SUST 202L: Sustainable Development Laboratory	A&S	1	PR or CONC: SUST 202.	Application of story mapping to sustainability studies research, analysis and data visualization methods to measure progress toward and communicate about the UN Sustainable Development Goals. Students will learn geographic information and story mapping skills associated with online research, media literacy and data literacy while building a digital story map focused on measuring progress toward the UN Sustainable Development Goals.

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SUST 302: Research for Sustainable Development	A&S	3		Focuses on qualitative research methods to investigate the cultural and spatial dimensions of sustainable development problems, whether at the local, regional, or international scale. Ethnographic and geospatial research skills will be emphasized. Students conduct a small study to practice new research approaches. Introduces the ethics and strategies of collaborative and participatory action research.
SUST 305: Sustainable Governance	A&S	3	PR: GEOG 205 or SUST 202	Understand and evaluate the rules, processes, and institutions involved in governance frameworks that promote social and environmental sustainability from the local to global levels. Helps prepare students for careers in politics, the nonprofit sector, consulting, and education. Students will apply skills such as interviewing, writing, and presenting results in different formats to diverse audiences.
SUST 308: Climate Modeling	A&S	3	PR: SUST 207 and SUST 240	Explores concepts and methods for generating climate models, forecasts, and predictions with a primary focus on physical process modeling. The first part of the course focuses on a deep exploration of the global climate system and associated physical processes and mathematical representations. The second part of the class focuses on computational methods used in climate modeling.
SUST 340: Urban Sustainability	A&S	3		Provides an urban perspective on environmental, socio-economic, and infrastructural sustainability problems and their consequences. Students gain a better understanding of how cities can be a culprit, but also a major part of the solution to today's sustainability challenges. Students take an active role in assessing the sustainability of cities, identifying shortcomings or future needs, and communicating potential solutions.
SUST 372: Sustainable Energy	A&S	3	(PR or CONC: SUST 101 and SUST 101L) or (PR: GEOL 101 and GEOL 101L)	Examines role and history of earth sciences in developing energy resources and assessing the sustainability impacts associated with their development, emphasizing the impact of extraction and production on the environment, from non-renewable fossil fuel sources and related greenhouse gas emissions and climate change to low or no-carbon renewable energy systems.
SUST 388: Careers in Sustainability	A&S	1		Development of career goals and preparation for entry in the job market.
SUST 402: Climate and Environmental Justice	A&S	3		Fosters a critical understanding of justice by examining the historical roots of climate and environmental inequalities worldwide. Why are some communities exposed to high levels of pollution and lack clean water while others enjoy lower environmental risks? Does inequality contribute to ecosystem degradation and climate change? What is the relationship between social and environmental justice and sustainability?

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SUST 403: Sustainability, Planning and Development	A&S	3	SUST 202.	Apply key issues in sustainability studies to the fields of regional planning and social action. Students learn approaches to building more sustainable communities at the local and regional level while deepening their understanding of key actors and institutions as well as approaches to shape their policies, practices, and projects to advance sustainable development goals.
SUST 410: Critical Minerals	A&S	3	PR or CONC: SUST 201.	Formation of critical minerals, such as lithium, nickel, cobalt, graphite, and rare earth elements (REEs); their role in renewable energy generation, energy storage, energy transmission, and other technologies; and practices in sustainable exploration, extraction of conventional and unconventional critical mineral resources.
SUST 420: Geothermal Energy	A&S	3	SUST 101.	Explores the origin and distribution of Earth's internal heat and the methods used to harness it to provide clean and renewable energy for applications ranging from domestic heat pumps to large electrical power plants.
SUST 430: Subsurface Resources for Energy Transition	A&S	3	SUST 201 and SUST 201L.	This course covers the fundamentals of carbon dioxide (CO ₂) and hydrogen (H ₂) storage, the physical, geochemical, and biological constraints that affect the performance and safety of their storage in subsurface geological formations, and the role of storage in the decarbonization of the energy sector for the sustainable energy transition.
SUST 480: Subsurface Methods	A&S	3	(SUST 201 and SUST 201L) and (PHYS 102 or PHYS 112).	Students develop the skills to produce subsurface interpretations from integrated geological, geophysical, and engineering datasets using specialized software. They construct maps and 3D visualizations of subsurface structure suitable for assessing geological CO ₂ or H ₂ storage, geothermal exploration, or fossil fuel development.
THET 410: Light Console Programming	CCA	3	THET 220.	Intermediate to advanced programming methods and procedures for industry standard lighting consoles, including typical lighting console hierarchy and operation and its field application and implementation. Application and development of skills in general lighting electrics, lighting management, and lighting networking set up and troubleshooting.