

December 2024

New Course

American Sign Language

ASL

Autumn 2025 Semester

4450 ASL Teaching Methods

U :

This course is a requirement to complete the American Sign Language (ASL) Teacher Training Certificate. This course examines methodologies of full-immersion teaching, purposeful interactive communicative language teaching, task-based and content-based instructional teaching techniques as they pertain to teaching American Sign Language (ASL).

Prereq: 4250 with a grade of C- or above, and enrolled in the ASL Elementary-Level Teaching Certificate, or permission of instructor.

Autumn 2025 Semester

4451 American Sign Language Teaching Practicum

U 3

This course provides students an opportunity to observe a qualified ASL instructor and apply knowledge from ASL Linguistics and Teaching Methods courses. Under direct supervision of the host instructor, this Teaching Practicum will include the creation and implementation of lesson plans, design and evaluation of assessments, and reflective practice.

Prereq: 4450 with a grade of C- or above, and enrolled in the ASL Elementary-Level Teaching Certificate, or permission of instructor.

Autumn 2025 Semester

4452 Navigating Academia

U

An exploration of university system structures focused on academia's "hidden" curriculum - unstated norms, policies, and expectations for applicants applying at institutions of higher education. Subjects include the C.V., teaching demonstrations, the interview process, course discursive evaluations and an examination of Deaf culture values and professionalism as they relate to academia.

Prereq: Enrolled in the ASL Elementary-Level Teaching Certificate, or permission of instructor.

Astronomy ASTRON

Spring 2025 Semester

4810 Advanced Order of Magnitude

U '

This course focuses on developing the skills needed to approach problems at an order-of-magnitude level. The methods learned in this course are often sufficient to draw conclusions about phenomena in our universe and also in our daily lives. This course expands on the skills developed in Astron3810 and builds intuition on when to apply various skills.

Prereq: 3810, or permission of instructor. This course is graded S/U.

Atmospheric Sciences

ATMOSSC

Summer 2025 Term

5701 Field Observations of Severe Convective Storms

U G 3

This off-campus, experiential learning field course allows students to directly observe deep, moist atmospheric convection (thunderstorms) and associated phenomena through a 10-day field trip to the U.S. Central Plains, including daily morning and evening weather forecast discussions, identifying radar-based storm characteristics, and use observations to determine likelihood of server weather.

Prereq: 2940 or Geog 5900; and AtmosSc 5940; and permission of instructor.

Business Admin: Marketing & Logistics

BUSML

Autumn 2025 Semester

4206 Strategic Marketing Decisions

J :

A marketing strategy exercise filled with tactical detail. Through a Marketplace simulation, students will be placed into a realistic international business setting where they will operate a marketing division for two years in compressed time through 8-rounds of decision-making.

Prereq: 3250, BusOBA 2320, 2321 and BusMHR 2292; and enrollment in the Business Management specialization. Not open to students with credit for 4204.

Business Admin: Operations and Business Analytics

BUSOBA

Autumn 2025 Semester

7240 Behavioral Operations

G :

This course explores the intersection of human behavior and operational processes within organizations. Students will delve into the psychological and sociocultural factors that influence decision-making, performance, and collaboration in operational settings. Key topics will include cognitive biases, motivation theories, group behavior, and the impact of leadership styles on operational outcomes.

Prereq: Enrollment in Fisher College of Business Grad program, or permission of instructor.

Chemistry CHEM

Spring 2025 Semester

3301 Science and Process of Drug Development

J 3

The course focus is on the science and public policy that govern drug development. The principles of chemistry and biochemistry are applied to research and development of drug therapeutics. The drug approval process of drug safety, toxicity, and clinical trials will focus on pharmaceutical industry challenges of drug affordability, safety, and drug development impact on global public health.

Prereq: Biology 1113.xx; Chem 1220, 1250, 1620 or 1920H. Not open to students with credit for PHR 3301. GE theme health and well-being course. Cross-listed in PHR.

Community Leadership

COMLDR

Summer 2025 Term

4797.02 Exploring Systems Thinking Leadership Abroad

U 3

Complex community issues related to food systems require more than food production knowledge; they also require a holistic understanding of how this is interconnected with the human dimension. This course will support students' growth in the knowledge and practice of systems thinking leadership and provide an international opportunity to apply them while exploring an international food system. Admission to the COMLDR Exploring Systems Thinking Leadership Education Abroad program required.

Prereg: Permission of instructor.

Design DESIGN

Autumn 2025 Semester

6130 Emerging Technologies Studio

G 3

Students explore emerging technologies and their potential for graduate design research through multidisciplinary and collaborative activities. Emphasizing making and learning through experimentation and practice, students conduct research, analyze and visualize data, translate findings into concepts, and design content and experiences, considering the complex systems in which they reside.

Prereq: Grad standing in Design MFA program.

Engineering Technology

ENGTECH

2602T Workplace Safety

U 11/2

This course provides practical guidance on workplace safety protocols, emphasizing personal protective equipment, safety procedures, and standards used in general industry professions to minimize risks and ensure a secure working environment.

This course is available for EM credit.

Autumn 2025 Semester

2603T Precision Tools

U 11/2

Practical guidance on workplace standard operating procedures related to proper tool use and maintenance in power equipment and hydraulic professions.

This course is available for EM credit.

Ethnic Studies ETHNSTD

Autumn 2025 Semester

3311 Latinx Experience Today: Latinx Youth Culture

U :

Given that the Latinx community in the U.S. is culturally, racially, ethnically, linguistically, economically, and politically diverse, this course offers students the opportunity to explore one or more aspects of the Latinx experience in the U.S. in the contemporary world, and to analyze different cultural practices using the intersectional study of race, ethnicity and gender as its cornerstones.

GE foundation race, ethnicity and gender div course.

French FRENCH

Spring 2025 Semester

3804 French Kiss

U :

Exploration of cultural texts (stories, songs, films, paintings, photos, etc.) that represent love and sex in France, from medieval courtly love, to 18th-century libertinism, to the swinging 1960s, to dating apps and the #Me Too movement. Examination of the historical and cultural, and therefore changing, nature of "acceptable" and "unacceptable" forms of love and sex.

GE theme traditions, cultures, and transformations course.

Geography GEOG

Autumn 2025 Semester

3650 A World Divided? Place, Space, and Regions in World Affairs

U 3

This course embraces a new approach to world regions by focusing on the ways that the constantly changing social and physical features of our planet are intertwined with, and inform, world affairs. This exploration is carried out in this class through a focus on contemporary geographical issues that reveal the diverse and dynamic social and physical environments we inhabit.

GE theme citizenship for div and just wrld course.

Autumn 2025 Semester

3703 Living with Artificial Intelligence

U :

This course examines issues surrounding AI from the vantage point of human geography, which broadly engages the construction of personal, social, cultural, political, economic, and ecological spaces in relation to societal developments. Effects of AI sweep across space, yet unevenly as individuals and groups experience it differently.

GE theme lived environments course.

German GERMAN

3434 Bad Science-Toxic Intersections Between Cultural Politics & Intellectual History

in German Tradition

U 3

Developments in science and technology raise key political questions and often reveal global fault lines - recent debates around AI, climate change, pandemics and public health show this. This course delves into the sometimes-toxic cultural politics of science historically, surveying key case studies (in biology, linguistics, medicine and more) from German history between 1780 and 1940. GE theme traditions, cultures, and transformations course.

Horticulture and Crop Science

HCS

Spring 2025 Semester

5623 Plant Mineral Nutrition

U G 3

Students will learn about the essential macro- and micronutrients required for plant growth and development. The course will cover the mechanisms of nutrient acquisition, translocation, storage, and utilization by plants from the soil.

Prereq: 2202; or 2204 and 2205; or Grad standing.

Knowlton KNOW

Spring 2025 Semester

5960 Design Competition

UG 1-6

Learn how to work in interdisciplinary teams to develop design proposals to solve problems in the natural or built environment.

Prereq: Jr, Sr or Grad standing. Repeatable to a maximum of 9 cr hrs or 3 completions.

Music MUSIC

Autumn 2025 Semester

3355 Hip Hop Sampling and Beat Making II

U 3

This course will advance each student?s skills for beat making and is a continuation of the skills learned in Music 3354. Students will further develop their skills of beat making and production focusing on the intricate details of their craft (i.e. DAW, sequence & song structure, and mixing and mastering techniques). Prereq: 3354.

Philosophy PHILOS

Autumn 2025 Semester

2332.02 Engineering Ethics for a Diverse and Just World with High Impact Research

U 4

This course provides students in engineering fields analytical and critical tools to become ethically attuned citizens who promote and sustain justice in a diverse world. Course requires an original research project. Prereq: GE writing and info literacy foundation course. Not open to students with credit for 2332.01. GE theme citizenship for div and just wrld course, High-Impact Practice Research and Creative Inquiry.

Pharmacy PHR

Spring 2025 Semester

3301 Science & Process of Drug Development

U 3

The course focus is on the science and public policy that govern drug development. The principles of chemistry and biochemistry are applied to research and development of drug therapeutics. The drug approval process of drug safety, toxicity, and clinical trials will focus on pharmaceutical industry challenges of drug affordability, safety, and drug development impact on global public health.

Prereq: Biology 1113.xx; Chem 1220, 1250, 1620 or 1920H. Not open to students with credit for Chem 3301. GE theme health and well-being course. Cross-listed in Chem.

Slavic Languages and Literatures

SLAVIC

5580 The Cinema of Real Existing Socialism: Czechoslovak and Polish Film, 1953-1989

U G 3

This course focuses on cinema under so-called real existing socialism in Poland and Czechoslovakia (1950s-1980s). It addresses how directors navigated the field between censorship and state-mandated cinematic aesthetics, and how the vision of a utopian communist society found expression in the form of film.

Social Work SOCWORK

Autumn 2025 Semester

8410 Measurement and Scale Development for Social Sciences

G 3

Advanced course on a mixed methods approach to measurement & scale development for social & behavioral sciences. Provides knowledge & applied skills for implementing a validation process that includes qualitative steps, such as defining a construct through a literature review, obtaining expert feedback on preliminary items, cognitive testing of items; and preliminary to advanced statistical tests.

Prereg: Grad standing, and enrollment in Social Work doctoral program; or permission of instructor.

Theatre THEATRE

Summer 2025 Term

5798.04 Study Tour: Czech Theatre and Culture

UG 3

Group travel experience in and around Prague, Czech Republic. Students will learn about the history and culture of the Czech people through the lens of Theatre, which has played a central role in sustaining Czech society throughout periods of war, political strife, and occupations. Participating students will attend live performances/events and tour famous theatres, sites, and museums.

Veterinary Clinical Sciences

VETCLIN

Spring 2025 Semester

7725 Introduction to Companion Exotic Medicine

V

Provides a basic background for a new graduate veterinarian regarding companion exotic species commonly treated in clinical settings. Small mammals, birds, reptiles, amphibians, and fish will be covered. This course is graded S/U.

Spring 2025 Semester

7785 Advanced Gastroenterology, Hepatology, and Pancreatology

V 1

This is an advanced `deep dive' elective open to VME III students in the Small Animal CAE, Mixed Animal CAE, or Individualized CAE with a species relevant clinical focus. The purpose of the elective is to mimic the spectrum of care required in clinical gastroenterology, hepatology, and pancreatology. This course is graded S/U.

Veterinary Preventive Medicine

VETPREV

Spring 2025 Semester

7276 Food Animal Medicine Symposium Leadership

V

Planning of a large scale veterinary educational meeting including, but not limited to, program development, speaker coordination, wet-lab development, logistics, meal planning, registration, transportation arrangements, financial budgeting and fundraising. Students are expected to also participate in wet lab instruction and conference delivery.

This course is graded S/U.

7700.01 Introduction to Aquatic Animal Medicine and Health

G V 2

Entry-level course exposing veterinary students to the diverse field of aquatic animal health, medicine, and welfare. Concepts will cover principles of aquaculture, the natural aquatic environment, common diseases and treatments. This course is open to The Ohio State University veterinary students of good standing as an elective course.

This course is graded S/U.

Spring 2025 Semester

7776.01 Dairy Herd Management and Preventive Medicine

G V 2

Applications of preventive medicine practices at the dairy herd level (small or large). Herd health programs, transition period, and laboratory practices in mastitis control will be covered.

This course is graded S/U.

Veterinary Medicine

VMCOLL

Spring 2025 Semester

6613.06 Thinking and Reasoning with Integrated Problems 3B

V 2

In this course, students advance their clinical approach to include treatment and management of disease processes. Students synthesize clinical evidence with didactic knowledge to identify and prioritize problems, select and justify diagnostic testing decisions, use evidence to create an appropriate treatment/management plan and refine approaches based on response or lack of response to therapy. This course is graded S/U.

Remove from Limbo

Dance DANCE

Spring 2025 Semester

7690 Production/Technology: Special Topics

G 1-3

Special topics in dance production/technology.

Prereq: Grad standing or permission of instructor. Repeatable to a maximum of 8 cr hrs or 4 completions. VSP Admis Cond course.

Environmental Engineering

ENVENG

Spring 2025 Semester

5410 Hazardous Waste Management and Remediation

UG 2

Environmental regulations; handling of hazardous wastes; risk assessment; site remediation processes; remedial alternatives; implementation; case studies.

Prereq: 3200 and CivilEn 3130, or Grad standing; or permission of instructor. Not open to students with credit for 714

History HISTORY

Autumn 2025 Semester

3526 20th-Century European International History

U 3

Europe and the World, 1914-2001.

Prereq or concur: English 1110 or equiv, and course work in History at the 2000 level, or permission of instructor. Not open to students with credit for 581.02. GE historical study course.

Mechanical Engineering

MECHENG

8514 Optical Techniques in Fluid Flows

G 3

Fundamentals of lasers, optics, and diatomic spectroscopy, and their application to flow and combustion diagnostics.

Prereq: Grad standing in Engineering or the Sciences, or permission of instructor. Not open to students with credit for 814.

Philosophy PHILOS

Spring 2026 Semester

3262 Contemporary Continental Thought

U 3

Examination of contemporary continental thought including such movements as structuralism, hermeneutics, critical theory, poststructuralism, semiotics, deconstruction, and postmodernism.

Prereq: 3 cr hrs in Philos other than 1500, or permission of instructor. Not open to students with credit for 307. GE lit and diversity global studies course.

Autumn 2025 Semester

3820 Philosophy of Perception

U 3

A philosophical examination of the nature of sensory perception, its relationship to conceptual thought and to consciousness, and its role in action and knowledge acquisition.

Prereq: Philos major, or 9 cr hrs of Philos course work exclusive of 1500, or permission of instructor. Not open to students with credit for 468.

Spring 2026 Semester

5530 Philosophy of Logic and Mathematics

U G 3

Analysis of basic concepts used in logic and in philosophical claims about logic and mathematics, such as proposition, logical truth, mathematical objects, and necessity.

Prereq: Not open to students with credit for 654.

Autumn 2025 Semester

5550 Advanced Logical Theory

U G 3

Topics include formal arithmetic, recursive functions, Turing machines, Godel's incompleteness theorems, Church's thesis, arithmetical truth, logical paradoxes, and higher-order logic.

Prereq: 2500 and 5500. Repeatable to a maximum of 9 cr hrs or 3 completions.

Political Science POLITSC

Autumn 2025 Semester

7264 Comparative Political Behavior

G 3

A cross-national examination of political behavior, including such topics as socialization, participation, voting, elite behavior, mass-elite linkages.

Prereq: Not open to students with credit for 777.

Remove from Withdrawal

Microbiology MICRBIO

Spring 2025 Semester

5160 Geomicrobiology

U G 3

The role of microorganisms in shaping our environment through mineralogical and geochemical processes at both local and global scales, in the present day and over geologic time periods.

Prereq: Sr or Grad standing in School of Earth Sciences, Department of Microbiology, Department of Civil, Environmental, and Geodetic Engineering, or School of Environment and Natural Resources. Not open to students with credit for EarthSc 5160. Cross-listed in EarthSc.

Update Course

Aerospace Engineering

AEROENG

Autumn 2025 Semester

4510 **Experimental Projects I**

Conceive, plan and design an experiment with a group of students. Emphasis on planning and experiment

preparation.

Prereq: 3543 and 3570; Sr standing: enrollment as AeroEng-BS student; and GenEd 1201 or 2601.

Agricultural Systems Management

AGSYSMT

Autumn 2025 Semester

5580 **Data Analytics in Production Agriculture**

U G

An overview of the principles of data management and analytics in support of field crop production. Lecture topics include: data generation and collection methods, and modeling, actionable spatial and temporal management recommendations at the sub-field level. Laboratory exercises include: broad overview and introduction to R, and its use in common data analyses in production agriculture.

Prereg: 5560; or ComLdr 3537, or AnimSci/HCS 2260, or ENR 2000, or AEDEcon 2005 or equiv; or Sr or Grad standing; or permission of instructor.

ANATOMY Anatomy

Spring 2025 Semester

6800 **Human Neuroanatomy**

Introduces graduate students to the basic concepts of human neuroanatomy.

Prereg: Grad standing in Anatomy, or permission of instructor.

Animal Sciences ANIMSCI

Summer 2025 Term

4597 **Contemporary Animal Use Issues**

The historical, biological, philosophical, environmental, and economic issues surrounding the use of animals to meet human needs.

Prereq: Jr or Sr standing, or permission of instructor. GE cross-disciplinary seminar course.

ANTHROP Anthropology

Summer 2025 Term

5685 Summer Field School in Archaeology

Practical experience in archaeological fieldwork including site survey, excavation, surveying and mapping, preservation, and other related methods and techniques of data recovery.

Prereq: Permission of instructor. Repeatable to a maximum of 15 cr hrs or 99 completions.

Architecture ARCH

Autumn 2025 Semester

5120E **History of Architecture II**

History of architecture from ancient to contemporary: historical inquiry, physical and cultural influences, theories, and analytical techniques. Continuation of 5110

Prereg: Honors standing.

Art Education ARTEDUC

5367 Native American Arts, Education, and Representations

UG



Introduces broad range of issues, theories, and practices of visual culture within the gaze of American Indians and how reaction to or rejection shapes indigenous identities, as well as non-Native understandings of American Indians. This course will explore action research practices, historical research methodologies, and critical readings.

Prereq: Not open to students with credit for 3367.

Summer 2025 Term

7606 Technology, Digital Texts, and Instructional Design for Online Learning

G 3

Theory and practice of engaging others in technologies and digital texts relative to art education practice.

Biomedical Engineering

BIOMEDE

Autumn 2025 Semester

4901.01 General BME Capstone I

U :

First course in the general BME capstone sequence. Introduction to design principles; needs finding, idea generation, and presentation of projects that include a real-world, medically relevant problem with a focus on potential users. Documentation and technical skills are developed throughout the course. Prereg: 2001, and GenEd 1201 or GenEd 2601; or permission of instructor. Concur: 3701.

Autumn 2025 Semester

4901.02 Industry BME Capstone I

U :

Serves as the first installment of the Industry BME capstone sequence. Provides students with a foundational understanding of design principles, emphasizing the application of these principles in the context of solving real-world industry challenges. Students will engage in a structured process that includes needs finding, idea generation, and prototyping with a keen focus on industry end-users.

Prereq: 2001, and GenEd 1201 or GenEd 2601, and concur: BIOMEDE 3702; or permission of instructor.

Autumn 2025 Semester

4901.03 Medical Product Development Capstone I

U :

First course in a culminating BME design sequence for those enrolled in the BS-MS pathway in Medical Product Development (MPD). Introduction to the Biodesign process, focused on opportunity definition, market analysis, and user-centered co-design in collaboration with clinical and corporate partners. Professional and technical skills related to biomedical industries are also developed. Enrollment in BME MPD program is required. Prereg: 2001, and enrollment in BME MPD program, and GenEd 1201 or 2601; or permission of instructor.

Business Admin: Marketing & Logistics

BUSML

Summer 2025 Term

4385 Building a Sustainable Supply Chain

U 17

Focuses on understanding how to measure and impact the long-term sustainability of a company's supply chain operations; learn practices for reducing carbon footprints and creating a more resilient supply chain, while meeting financial goals.

Prereq: 3380 or 3381; and AcctMIS 2200, 2300, and BusMGT 2320, 2321; and BusMHR 2291 or 2292; and permission of instructor.

Summer 2025 Term

8383 Optimization Modeling in Logistics

G 3

Focus on the application of optimization modeling techniques to logistics problems. The goal is to familiarize students with advanced modeling techniques and learn how they have been applied to solve logistics problems in the academic literature.

Prereq: 7380 and 7381. Repeatable to a maximum of 9 cr hrs.

8385 Empirical Methods in Logistics & Supply Chain Management Research

G

3

Overview of empirical research in Logistics and Supply Chain Management, with a focus on appropriate topics, literature review, and hypothesis development in empirical papers. Additional focus on data analysis through statistical and econometric methods.

Prereq: Enrollment in Fisher College of Business PhD program, or permission of instructor. Repeatable to a maximum of 9 cr hrs.

Business Admin: Operations and Business Analytics

BUSOBA

Autumn 2025 Semester

4254 Projects in Sustainable Supply Chains

U 3

This course seeks to examine and build awareness regarding more sustainable business processes through a combination of two methods: Student reading of several current published works in various areas of sustainability, coupled with in-class debate and discussion and student experiential learning. Students will be working in teams of 3 to 5 students on a project with a sponsoring company.

Prereg or concur: AEDEcon 3105 or BusOBA 3230 or BusML 3380; or permission of instructor.

Autumn 2025 Semester

4263 Strategic Global Sourcing

U 3

This course focuses on the strategic design and management of the global supply base. The course focuses on identifying and understanding risks and uncertainties related to make-buy, location, and on-going supplier management. Beyond that, it focuses on cross-functional decision-making under risk and uncertainty in this context.

Prereg: 2320, 2321, 3230, AcctMIS 2200 and 2300; and BusMHR 2291, or 2292; or permission of instructor.

Chemical and Biomolecular Engineering

CBE

Autumn 2025 Semester

4760 Chemical Engineering Economy and Strategy

U :

Economic and strategy considerations in research, development, design, and manufacturing in the chemical process industry.

Prereq: 3610, and enrollment in CBE or EngPhysics major, and GenEd 1201 or GenEd 2601; or Grad standing: or permission of instructor.

Civil Engineering CIVILEN

Autumn 2025 Semester

4001 Civil Engineering Capstone I

U 2

Part 1 of the two semester course sequence for the culminating design component in the curriculum for students in Civil Engineering. Must be taken in semester preceding 4002, with sequence completed as close to graduation as possible.

Prereq: 2050 or Stat 3450, 3460, or 3470; and CivilEn 2060, 2405, 2410, 2810, 3080, 3130, 3160, 3310, 3510, 3541, 3700, and 4320 or 4350, and EnvEng 3200, and GenEd 1201 or GenEd 2601; and enrollment in CivilEn major. Not open to students with credit for 4000.01.

Autumn 2025 Semester

4011 Civil Engineering Global Capstone I

U 2

Part 1 of a two semester course sequence satisfying the culminating design component in the curriculum for students in Civil Engineering set in a global development context. Must be taken in sequence with CivilEn 4012, taken as close to graduation as possible.

Prereq: 2410, 2810, 3080, 3130, 3160, 3310, 3510, 3540, 3541, 3700, 4320 or 4350; and EnvEng 3200; and GenEd 1201 or GenEd 2601; or permission of instructor.

Dentistry DENT

6540.01 Restorative Dentistry I

D 2

Introduction to the principles of conservative tooth preparations, characteristics of dental amalgam and its use in the restoration of posterior teeth and class V lesions . Students will learn how to prepare different types of cavities. The course also include information related to the caries process, techniques to control lesions, and restorative dentistry materials.

Repeatable to a maximum of 6 cr hrs.

Dental Hygiene DENTHYG

Spring 2025 Semester

4193 Individual Studies in Dental Hygiene

U ½ - ;

Advanced studies in any relevant area of dental hygiene.

<u>Prereq: Permission of instructor.</u> Repeatable to a maximum of 9 cr hrs or 3 completions. This course is graded S/II

Design DESIGN

Autumn 2025 Semester

6110 Methods and Tools for Conducting Design Research

G 3

Hands-on learning experiences in using and analyzing design research methods, tools and techniques, user-centered design research (applied ethnography, contextual inquiry, evaluative research, usability) and generative design research.

Prereq: Grad standing in Design, or permission of instructor. <u>Not open to students with credit for 6100.</u> Repeatable to a maximum of 6 cr hrs.

Autumn 2025 Semester

6430 Graduate Design Studio

G 3

Hands-on learning experiences in the studio or field. Collaborative teams work to explore, identify and/or solve problems. Topics vary depending on the opportunity for sponsored projects, emerging trends in practice and expertise of instructor.

Prereq: Grad standing in Design, or permission of instructor. <u>Not open to students with credit for 6400.</u> Repeatable to a maximum of 18 cr hrs.

Electrical and Computer Engineering

ECE

Spring 2025 Semester

5101 Introduction to Wireless Networking

UG 3

Fundamental concepts in cellular design, Wireless-LANs, MANETs, and sensor networks will be explored. Specific topics will include propagation, fading, cellular-design, power-management, routing, scheduling, and control

<u>Undergrad Prereq: 3561 or CSE 3461, and Stat 2450 or 3470.xx. Grad Prereq: Grad standing in Engineering or Math and Physical Sciences.</u> Not open to students with credit for CSE 5463. Cross-listed in CSE 5463.

Summer 2025 Term

5567.02 Reverse Engineering and Malware Analysis

U G 3

This course will give students an overview of cutting edge reverse engineering techniques as well as software security and defense practices. Programming experience in C required.

Prereq. CSE 1222, or permission of instructor. Prereq or concur: ECE 5561. Not open to students with credit for CSE 5477.02. Cross-listed in CSE 5477.02.

Engineering ENGR

1282.02H Fundamentals of Engineering for Honors II - Research Informed Impactful Design

11 3

Introduction to 3D visualization and CAD; engineering design process; teamwork; written, oral and visual communications; project management. Alternative course with an emphasis on a research and development project.

Prereq: Honors standing; and 1281.01H, or 1281.02H, or 1281.03H; and enrollment in the College of Engineering, or permission of instructor. Not open to students with credit for 1182.01, 1182.02, 1182.03.

Engineering Technology (BS)

ENGRTEC

Autumn 2025 Semester

3600 Technology, Structure and Applications for Controls

U 3

This course communicates the structure of a manufacturing organization, the technology and systems in each level of the organization and the roles in the automation, control, and monitoring of automation manufacturing systems. It provides insight in the types of manufacturing systems, equipment/machinery, sensors/control devices and how to develop code for these systems for an integration.

Prereg: 4200.

Environment and Natural Resources

ENR

Autumn 2025 Semester

3900 Sustainability Metrics

U

Addresses the use of metrics, data, and indicators to measure sustainability and track progress. The course will survey a broad range of environmental challenges and evaluate the choices confronting public and private groups. Students will use software tools to quantify sustainability measures.

Prereg: 2000, or AEDEcon 2005, or Stat 1450.01 or 2450.01.

Environmental Engineering

ENVENG

Autumn 2025 Semester

4090 Environmental Engineering Capstone Design

U 3

Culminating design course for the Environmental Engineering program. Must be taken as close to graduation as possible.

Prereq: 3200, 3210, CivilEn 3160, and 2060, and GenEd 1201 or GenEd 2601; or permission of instructor.

HISTART HISTART

Spring 2025 Semester

2007 From Buddha to Bollywood: Art and Architecture of Southern Asia

U 3

This course is designed to offer students a comprehensive overview of the diverse visual cultures of South Asia, particularly through the lenses of race, ethnicity, and gender. We will delve into a broad range of topics, including architecture, sculpture and painting, performative traditions, and film. We will develop a critical vocabulary to better understand the rich visual heritage of India.

GE foundation lit, vis and performing arts and race, ethnicity and gender div course.

History HISTORY

Spring 2025 Semester

2201 Ancient Greece and Rome

U 3

Comparative historical analysis of ancient Mediterranean societies in the Near East, Greece and Rome from the Bronze Age to the Fall of Rome, with a focus on citizenship. Students will compare notions of citizenship in empires and authoritarian regimes with smaller, more egalitarian city-states and republics, and analyze the ideological similarities and differences between antiquity and today.

Prereq: Not open to students with credit for 1211. GÉ historical study course. GE theme citizenship for div and just wrld course.

3282 History of the Soviet Union

U 3

History of the Soviet Union from the Russian Revolution of 1917 to the collapse of communism in 1991. GE historical study and diversity global studies course. GE <u>theme traditions</u>, <u>cultures</u>, <u>and transformations</u> course.

Autumn 2025 Semester

3307 History of African Health and Healing

U 3

Campus: COL LMA MNS MRN NWK WST

African approaches to health and healing; interaction between religion, culture and healing; intersections and contradictions between African and Western concepts of health and healing.

GE historical study and diversity global studies course. GE theme health and well-being course.

Spring 2025 Semester

3500 U.S. Diplomacy from Independence to 1920

U 3

Between 1776 and 1920, the United States transformed from a fragile confederacy of bickering states into a globe-spanning empire. This class will consider American foreign relations exploring the contested ideas of ideology and expansion that motivated official policy and international affairs, with a particular emphasis on themes of expansion, immigration, and migration.

GE historical study course. GE theme migration, mobility, and immobility course.

Spring 2025 Semester

3552 War in World History, 1900 - Present

U 3

Campus: COL LMA MNS MRN NWK <u>WST</u>

Study of the causes, conduct, and consequences of warfare around the world, 1900-present. GE historical study course. GE theme traditions, cultures, and transformations course.

Spring 2025 Semester

3570 World War II

U 3

A study of the causes, conduct, and consequences of World War II, with a particular emphasis on chancing conceptions of citizenship. In many ways, the war was used as a tool to define what it was to be a nation and a citizen of that nation, and what that meant for each country?s interests around the world when those ideals clashed.

GE historical study and diversity global studies course. GE theme traditions, cultures, and transformations

Human Nutrition HUMNNTR

Spring 2025 Semester

3415 Global Nutrition Issues

U 2

Topics in global nutrition with critical appraisal of research basis and alternative viewpoints. Current issues include research and evaluation, major global nutrition issues (obesity, food insecurity, malnutrition, bioengineering, vegetarianism).

Prereq: 2310 or 2410; or AnimSci 3130; or HumnNtr 2210 or 2410 and major in FCSEd; or HumnNtr 2210 or 2410 and minor in Human Nutrition.

Linguistics LING

Summer 2025 Term

8998 Non-thesis graduate research

G ½ - 15

Non-thesis graduate research.

Repeatable to a maximum of 15 ch or 15 completions. This course is graded S/U.

Mechanical Engineering

MECHENG

4901.01 ME Capstone Design I: General Projects

U 2½

First course of 2-semester capstone sequence. Students work on design problems proposed by faculty. Emphasis on problem definition, requirements, and design proposal.

Prereq: 3360, 3671, and 3870, and GenEd 1201 or GenEd 2601. Prereq or concur: 4510, and enrollment as a MechEng-BS Student; or permission of instructor. Not open to MechEng pre-majors.

Nursing NURSING

Autumn 2025 Semester

4241 Synthesis of the Determinants of Health to Address Population Health Outcomes

U 4

This course provides an opportunity for students to synthesize the concepts of population health to influence health outcomes.

Prereq: 3240, 3260, 3271, 3272, 3280, 3460, and 3780, and enrollment in BSN traditional program; or enrollment in LPN to BSN track; or permission of instructor.

Autumn 2025 Semester

4310 Science of Wellness and Self-Care

U 1

This course is designed to help the student explore evidence-based strategies and resources that enhance wellness and professional growth.

Prereq: 3240, 3260, 3271, 3272, 3280, 3460, and 3780, and enrollment in BSN traditional program; or enrollment in LPN to BSN track; or permission of instructor.

Philosophy PHILOS

Autumn 2025 Semester

2332.01 Engineering Ethics for a Diverse and Just World

U 3

This course provides students in engineering fields analytical and critical tools to become ethically attuned citizens who promote and sustain justice in a diverse world.

GE theme citizenship for div and just wrld course.

Prereq: Not open to students with credit for 2332.02.

Pharmacy PHR

Summer 2025 Term

7010 Advance Pharmacy Practice Experiences Option

P 21/2

Advanced pharmacy practice experience rotations including ambulatory, community, institutional and elective settings. Students may receive Honors Level Performance distinction and have a textual note added to their official University transcript.

Prereq: Enrollment in PharmD program, or permission of instructor. Repeatable to a maximum of 12 cr hrs. <u>This course is graded S/U.</u>

Summer 2025 Term

7011 Advance Pharmacy Practice Experiences I

P 2½

Advanced pharmacy practice experience rotations including ambulatory, community, institutional and elective settings. Students may receive Honors Level Performance distinction and have a textual note added to their official University transcript.

Prereq: Enrollment in PharmD program, or permission of instructor. This course is graded S/U.

Summer 2025 Term

7012 Advance Pharmacy Practice Experiences II

P 21/2

Advanced pharmacy practice experience rotations including ambulatory, community, institutional and elective settings. Students may receive Honors Level Performance distinction and have a textual note added to their official University transcript.

Prereq: Enrollment in PharmD program, or permission of instructor. This course is graded S/U.

7013 Advance Pharmacy Practice Experiences III

P 21/2

Advanced pharmacy practice experience rotations including ambulatory, community, institutional and elective settings. Students may receive Honors Level Performance distinction and have a textual note added to their official University transcript.

Prereg: Enrollment in PharmD program, or permission of instructor. This course is graded S/U.

Summer 2025 Term

7014 Advance Pharmacy Practice Experiences IV

P 21/2

Advanced pharmacy practice experience rotations including ambulatory, community, institutional and elective settings. Students may receive Honors Level Performance distinction and have a textual note added to their official University transcript.

Prereq: Enrollment in PharmD program, or permission of instructor. This course is graded S/U.

Summer 2025 Term

7015 Advance Pharmacy Practice Experiences V

P 21/

Advanced pharmacy practice experience rotations including ambulatory, community, institutional and elective settings. Students may receive Honors Level Performance distinction and have a textual note added to their official University transcript.

Prereg: Enrollment in PharmD program, or permission of instructor. This course is graded S/U.

Summer 2025 Term

7016 Advance Pharmacy Practice Experiences VI

P 21/

Advanced pharmacy practice experience rotations including ambulatory, community, institutional and elective settings. Students may receive Honors Level Performance distinction and have a textual note added to their official University transcript.

Prereq: Enrollment in PharmD program, or permission of instructor. This course is graded S/U.

Summer 2025 Term

7017 Advance Pharmacy Practice Experiences VII

P 2½

Advanced pharmacy practice experience rotations including ambulatory, community, institutional and elective settings. Students may receive Honors Level Performance distinction and have a textual note added to their official University transcript.

Prereq: Enrollment in PharmD program, or permission of instructor. This course is graded S/U.

Summer 2025 Term

7018 Advance Pharmacy Practice Experiences VIII

P 21/

Advanced pharmacy practice experience rotations including ambulatory, community, institutional and elective settings. Students may receive Honors Level Performance distinction and have a textual note added to their official University transcript.

Prereq: Enrollment in PharmD program, or permission of instructor. This course is graded S/U.

Summer 2025 Term

7019 Advance Pharmacy Practice Experiences IX

P 21/3

Advanced pharmacy practice experience rotations including ambulatory, community, institutional and elective settings. Students may receive Honors Level Performance distinction and have a textual note added to their official University transcript.

Prereq: Enrollment in PharmD program, or permission of instructor. This course is graded S/U.

Portuguese PORTGSE

2331 THE EMPIRE SINGS BACK: Portugal's New African Rhythms & Cultural

Resistance in the European Diaspora

U = 3

Exploration of the vibrant African & Afro-Portuguese musical genres that have emerged in Portugal as a result of a longstanding colonial and imperial history connecting Portugal and several African continent countries. Focus on how race, ethnicity, & gender interact with music production, fruition, and distribution. Taught in English. GE cultures and ideas and diversity global studies course. GE foundation historical and cultural studies and race, ethnicity and gender div course.

Spanish SPANISH

Summer 2025 Term

2302 Spanish Conversation

U 1 - 9

Intensive practice in conversation on selected / variable topics. Beginning to advanced level conversation / speaking skills. Credit only awarded through transfer credit or global education opportunities. This course does not fulfill GE or major/minor level requirements. This course may be awarded for credit at the Beginning to Advanced levels of Spanish fluency.

Repeatable to a maximum of 9 cr hrs or 6 completions.

Veterinary Biosciences

VETBIOS

Spring 2025 Semester

7712 Applied Veterinary Clinical Pathology

V 1/3

Designed to review how to evaluate cytology samples from various body systems using a videomicroscope and projected images.

Prereq: VetMed 6618. This course is graded S/U.

Veterinary Clinical Sciences

VETCLIN

Spring 2025 Semester

7622 Advanced Equine Medical and Surgical Procedures

V

A laboratory course designed to develop skills in ultrasound examination, proper use of diagnostic nerve blocks and intra-articular injections, and surgical procedures in the horse.

Prereq: 3rd yr standing in Veterinary Medicine program. This course is graded S/U.

Spring 2025 Semester

7718 Clinical Problem Solving and Treatment in Small Animals I - Internal Medicine

V :

Exposes the student to approximately 30 clinical cases likely to be encountered in internal medicine of sick dogs and cats using an interactive format with progressive disclosure of information to the students. Prereq: 3rd yr standing in Veterinary Medicine program. This course is graded S/U.

Spring 2025 Semester

7727 Avian Medicine and Surgery

V

An overview of all aspects of avian medicine including nutrition, behavior, captive management, diagnostic and therapeutic techniques, disease problems, anesthesia and surgery. Includes companion birds, wildlife, backyard poultry and zoo species.

Prereq: 2nd or 3rd yr standing in Veterinary Medicine program. This course is graded S/U.

Spring 2025 Semester

7732 Equine Lameness and Gait Abnormalities

/

Acquaints students with conditions of the horse that produce gait abnormalities as the presenting clinical complaint.

Prereq: 3rd year standing in Veterinary Medicine program. This course is graded S/U.

7747 Small Ruminant Medicine and Surgery

G V 2

Common medical, surgical, and management related problems in sheep, goats, and South American camelids. Prereq: DVM or equiv, or 3rd yr standing in Veterinary Medicine program. This course is graded S/U.

Spring 2025 Semester

7775 Anesthesia Case Management

V 1

Covers anesthetic management of veterinary patients for elective and emergency procedures.

Prereg: Third-year standing in veterinary medicine program. This course is graded S/U.

Spring 2025 Semester

7794 Equine Theriogenology Laboratory

V 1/

A laboratory session that will enable students to practice techniques for assessing reproductive function and fertility potential of horses.

Prereq: 3rd yr standing in Veterinary Medicine program, and enrollment in the Equine Career Area of Emphasis; or permission of instructor. This course is graded S/U.

Veterinary Preventive Medicine

VETPREV

Spring 2025 Semester

7700.02 Introduction to Aquatic Animal Medicine and Health

G V 2

Entry-level course exposing veterinary students to the diverse field of aquatic animal health, medicine, and welfare. Concepts will cover principles of aquaculture, the natural aquatic environment, common diseases and treatments. This course is open to The Ohio State University veterinary students of good standing as an elective course.

Spring 2025 Semester

7770 Clinical Problems in Zoo and Wildlife Medicine

G V

General concepts and principles related to zoo and wildlife medicine. Allows Veterinary students to increase their exposure to nontraditional fields of practice.

Prereq: Grad or professional standing in Veterinary Medicine program. This course is graded S/U.

Spring 2025 Semester

7776.02 Dairy Herd Management and Preventive Medicine

G V 2

Applications of preventive medicine practices at the dairy herd level (small or large). Herd health programs, transition period, and laboratory practices in mastitis control will be covered. Prereg: Grad standing.

Spring 2025 Semester

7778 Topics in Dairy Production Medicine

G V 1

Expose students to leaders in the dairy industry and production medicine as well as to ideas that they may not be exposed to anywhere else in the veterinary professional curriculum.

Prereq: Grad or professional standing in Veterinary Medicine program. This course is graded S/U.

Withdraw Course

Electrical and Computer Engineering

ECE

Summer 2025 Term

5007 Communications Laboratory

U G 1/2

A laboratory in digital data communication implementing a software-defined modem: quadrature modulation; phase-shift keyed modulation; inter-symbol interference; timing and frequency recovery.

Prered or concur: 5000 (501), and enrollment in ECE or EngPhysics major; or Grad standing in ECE. Not open to students with credit for 4007 or 508.

5207 **Real-Time Digital Signal Processing Laboratory**

U G

Real-time signal processing of acoustic signals and video images; finite impulse response filters; adaptive

filtering; array processing; fast Fourier transform.

Prereq or concur: 5200, and enrollment in ECE major or Grad standing in ECE. Not open to students with credit for 4207 or 609.