Carnegie Mellon University-Wide Studies Courses

About Course Numbers:
Each Carnegie Mellon course number begins with a two-digit prefix that designates the department offering the course (i.e., 76-xxx courses are offered by the Department of English). Although each department maintains its own course numbering practices, typically, the first digit after the prefix indicates the class level: xx-1xx courses are freshmen-level, xx-2xx courses are sophomore level, etc. Depending on the department, xx-6xx courses may be either undergraduate senior-level or graduate-level, and xx-7xx courses and higher are graduate-level. Consult the Schedule of Classes (https://enr-apps.as.cmu.edu/open/SOC/SOCServ/etl) each semester for course offerings and for any necessary pre-requisites or co-requisites.

99-101 Computing @ Carnegie Mellon
Fall and Spring: 3 units
Computing@Carnegie Mellon (C@CM) is a 3-unit, pass/fail mini course that will help you develop foundational computing and information literacy skills, focusing on the tools and technologies that are specific to Carnegie Mellon so you can be successful in your other academic courses. All undergraduate students are required to take the course. C@CM is offered in a hybrid format through the Open Learning Initiative’s (OLI) online course environment; meaning that you'll complete your coursework online and attend a face-to-face recitation session for review and supplemental instruction.
Course Website: http://www.cmu.edu/u-c-cm/

99-104 Carnegie Skills Workshop
All Semesters: 3 units
Carnegie Skills Workshop (CSW) is a 3-unit course that helps students to define, locate, evaluate, organize and present information. CSW focuses on essential tools and technologies necessary for the successful completion of research and writing projects assigned in other courses. The same skills are indispensable at any stage in a person’s professional career and personal life. All undergraduate students at CMU-Qatar are required to take the CSW course. Incoming students are expected to take CSW during the fall semester.

99-129 DC Grand Challenge First-Year Seminar: Unreality: Immersive and Spatial Media
Intermittent: 9 units
Virtual news stories and game worlds are accessible by putting on cardboard goggles, theme parks are engineered to provide convincing multisensory experiences, and workforces are reliant on augmented views of factory floors. Immersive and spatial media constitute a suite of emerging technologies that offer the opportunity to expand arts, entertainment, science, design, commercial enterprises and countless other domains in ways that were previously limited to science fiction. The potential for augmented reality to disrupt our current technological ecosystem is tremendous. Many of these technologies are now 50 years old and just starting to enter the commercial realm. As immersive experiences and augmented realities become more integrated into our work and leisure, do we need to worry about the ways that unreality affect our experiences of reality, or our interactions with each other? How do we know that we can trust our senses to tell us what is real? How do we begin to grapple with the ethical, cultural, social, technological, and regulatory implications of this shift?

99-190 Managing Stress, Restoring Harmony
Fall: 6 units
The course is designed to explore the subject of stress and how it can best be managed to achieve optimal health and wellbeing. Topics addressed will include: the environmental, mental and emotional components of stress, factors that affect the experience of stress, how stress contributes to illness, and an overview of various stress management techniques. Several lectures will be supported by Carnegie Mellon faculty and staff.

99-194 Intimate Relationships & Sexual Health
Fall: 6 units
This course will explore the expression of human relationships and sexuality. Emphasis will be placed on college health and the social, cultural and health factors that affect relational interactions. This course is designed to assist students with improved functioning in personal relationships, provide information to take care of their sexual health and help them acquire skills to make decisions now and in the future. Topic areas will include relationships, sexual behavior, sexual health and interpersonal skills. Academic support will be provided by campus and community partners.

99-250 Seminar for Peer Tutors
Fall and Spring: 4.5 units
SPECIAL PERMISSION REQUIRED: YES The purpose of this training course is to provide undergraduates with the knowledge, skills, and experience necessary to become effective Peer Tutors. Throughout the course, students will be exposed to the mission and goals of Academic Development and the Peer Tutoring Program. The class lasts approximately nine weeks and is generally offered in the spring term from February through April. The course explores the roles and responsibilities of the tutor while offering insights into effective tutoring strategies through interactive discussion and role plays. In addition, trainees work hand-on with experienced tutors to troubleshoot potential problems and situations. Students will gain experience in group dynamics, communication skills, study strategies, referral resources, leadership, and creating a supportive learning environment. Teaching practice is an integral part of the training program. Students must complete an application in person or electronically at: https://www.cmu.edu/academy/jobs/index.html and then be interviewed by the instructor(s) to determine if the student possesses the basic qualifications.
Course Website: http://www.cmu.edu/academy/studentjobs/

99-251 Seminar for Supplemental Instruction
Fall and Spring: 4.5 units
SPECIAL PERMISSION REQUIRED: YES The purpose of this training course is to provide undergraduates with the knowledge, skills and experience necessary to become effective Supplemental Instruction (SI) and EXCEL Leaders. Throughout the course, students will be exposed to the mission and goals of Academic Development and the Supplemental Instruction Program. The class lasts approximately ten weeks and is generally offered in the spring term from February through April. Course participants will actively explore collaborative learning instructional practices, learning theory, group dynamics, study strategies, and communication and leadership skills in order to create a supportive learning environment. Teaching practice is an integral part of the training program. Students must complete an application in person or electronically at: https://www.cmu.edu/academy/jobs/index.html and then be interviewed by the instructor(s) to determine if the student possesses the basic qualifications.
Course Website: http://www.cmu.edu/academy/studentjobs/

99-252 Seminar for Academic Coaching
Fall and Spring: 4.5 units
SPECIAL PERMISSION REQUIRED: YES The purpose of this training course is to provide undergraduates with the knowledge, skills and experience necessary to become effective Academic Coaches (AC’s). Throughout the course, students will be exposed to the mission and goals of Academic Development and the Academic Coaching Program. The class lasts approximately nine weeks and is generally offered in the spring term from February through April. Students will gain experience in effective and efficient study strategies, learning theory, communication skills, group dynamics, referral resources and how to create a supportive learning environment. Teaching practice is an integral part of the training program. Students must complete an application in person or electronically at: https://www.cmu.edu/academy/jobs/index.html and then be interviewed by the instructor(s) to determine if the student possesses the basic qualifications.
Course Website: http://www.cmu.edu/academy/studentjobs/

99-270 Summer Undergraduate Research Apprenticeship
Summer
This course consists of student participation in projects focused on undergraduate research or creative inquiry under the direction of a Carnegie Mellon faculty member. Tenure track, teaching track, research track, librarian track, and special faculty may serve as SURA mentors. The subject of the inquiry, the number of units, and the criteria for grading are to be determined by the student and the faculty mentor. This agreement should be formalized in a one-page apprenticeship verification form that includes documented approval from the faculty mentor with a copy to be submitted to the Undergraduate Research Office. The students are responsible for finding a faculty member who is willing and able to supervise them on campus over the summer. In addition to the research experience, course requirements include a series of workshop sessions over the course of the summer that will introduce students to the basics of research design. Students will also be expected to present and/or attend the campus-wide undergraduate research symposium, Meeting of the Minds, in May of the following year. Students may register for a maximum of nine units with work to be completed over an eight-week period during the summer term.
99-275 Summer ReCharge
Summer: 3 units
The goal of this course is to provide students with the tools they will need to become better equipped to handle the challenges they have or will face in their academic experiences. It is designed to promote student awareness of the necessary components of a successful educational experience. Each week, students will engage in self-awareness activities and group discussion of topics in key areas shown to be predictive of student success. Through discussion with peers, exposure to academic findings, and self-reflection essays, this course will provide students with the opportunity for self-growth and allow them to become better connected with the campus community.

99-347 Global Health: Gender Equality
Fall: 3 units
NOTE: THIS IS A WEEKEND COURSE ONLY: November 1-3, 2019. It will be held on the University of Pittsburgh's campus. The address is: Sennott Square, Rm 2400. With each global health crisis, the interconnectedness of populations around the globe becomes more pronounced. Diseases not only affect the health of communities, but they have a profound impact on political, economic, and social stability within countries and regions. This course engages the interdisciplinary nature of global health by approaching the issue through the lens of the Sustainable Development Goals (SDG) developed by the United Nations. The SDGs range in focus from good health and well-being to gender equality to clean water and sanitation to affordable, clean energy. By engaging the ways that health has a stake in these goals, the course will bring the expertise of faculty from the University of Pittsburgh and CMU as well as practitioners to understand and address the issue surrounding global health from a myriad of perspectives and avenues. With an applied focus, the course will assist students in engaging and advocating for a community on a global health issue through a policy memo. This iteration of the course will examine gender equality and SDG #5.

99-352 IdeATe: Soft Fabrication Skills
Fall and Spring: 1 unit
If you have a particular weekend for the A3 section of this micro course are Feb 6, Feb 13, Feb 20. Textiles are a ubiquitous part of our everyday tactile experience. This workshop series aims to introduce textile techniques to participants with diverse backgrounds across the CMU campus. The fabrication skills and concepts that will be covered in this course will be taught from an interdisciplinary approach to merge practices in arts and technology. Students will learn methods of working with fabric such as hand and machine sewing, felting and knitting, along with merging aspects of digital fabrication and physical computing using flexible materials. Through discussions and demos, participants will have the opportunity to explore new methods of fabrication to integrate into their own practice.

Course Website: https://courses.ideate.cmu.edu/99-352 (https://courses.ideate.cmu.edu/99-352/)

99-353 IdeATe: CAD and Laser Cutting
Fall and Spring: 1 unit
PLEASE NOTE: The specific meeting dates for the A3 section of this micro course are Feb 6, Feb 13, Feb 20. Textiles are a ubiquity part of our everyday tactile experience. This workshop series aims to introduce textile techniques to participants with diverse backgrounds across the CMU campus. The fabrication skills and concepts that will be covered in this course will be taught from an interdisciplinary approach to merge practices in arts and technology. Students will learn methods of working with fabric such as hand and machine sewing, felting and knitting, along with merging aspects of digital fabrication and physical computing using flexible materials. Through discussions and demos, participants will have the opportunity to explore new methods of fabrication to integrate into their own practice.

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99-355 IdeATe: Introduction to Arduino
Fall and Spring: 1 unit
PLEASE NOTE: The specific meeting dates for the A3 section of this micro course are Feb 12, Feb 19, Feb 26. The specific meeting dates for the B3 section of this micro course are Feb 28, Mar 7, Mar 14. This practical course is designed to quickly take students from beginner to basic functional knowledge of the Arduino microcontroller in three weekend 5-hour sessions. You can expect to learn a) how to write and upload simple code for the Arduino to perform basic logic functions like reading a switch to change a motor's direction, b) how to integrate a variety of physical inputs including knobs, distance sensors, and light sensors, c) how to integrate a variety of physical outputs such as motors, lights, and speakers, and d) how to put all of these together to build simple self-contained low-cost easy to power systems. The course culminates in students producing and artful and/or functional interactive creation of their own design. Enrolled students have access to IdeATe's well-equipped Physical Computing Laboratory in the basement of Hunt Library, as well as access to undergraduate students, faculty, and staff interested in learning new skills in an interdisciplinary environment are welcome. There are no technical prerequisites.

Course Website: http://courses.ideate.cmu.edu/99-355 (http://courses.ideate.cmu.edu/99-355/)

99-356 IdeATe: Digital Media Literacies: Great World Challenge
Fall and Spring: 9 units
This course introduces students to new media for ethically finding, evaluating, producing and sharing artistic and scholarly innovations. It allows students the opportunity to gain practice with and exposure to tools, technologies and processes which support data analysis, visualization, communication, presentation and sharing through a variety of emerging and established dissemination channels. Students who excel in the course may be further supported in identifying and pursuing appropriate publication outlets for their research. The course will be of particular interest to students planning to engage in further undergraduate research opportunities.

99-357 IdeATe: Pragmatic Photography
Fall and Spring: 1 unit
PLEASE NOTE: The specific meeting dates for the A3 section of this micro course are Feb 14, Feb 21. The specific meeting dates for the B3 section of this micro course are Feb 27, Mar 6. Pragmatic Photography is a digital imaging course for the non-photographer. A tech-first approach provides a strong grounding in the core concepts and techniques of image-based media. This course will enable students to create photographs for project documentation. This class will not require special cameras or software; students will use commonly-available photo-editing software to create images using DSLRs, point and click cameras, or their cell phones. The course focuses on general principles that apply across different equipment and software.

99-358 IdeATe: Introduction to the Unity Game Engine
Fall and Spring: 1 unit
PLEASE NOTE: The specific meeting dates for the A3 section of this micro course are Feb 7, Feb 14, Feb 21. The specific meeting dates for the B3 section of this micro course are Feb 27, Mar 6, Mar 13. This course is designed for students with little to no experience working with game engines as entry point into the field of game development. Students will learn the basics of the Unity3D engine, and to creatively and effectively build their own simple games. This course will cover topics such as navigating and using the engine, basic game programming in C#, user interface development and introductory game design principles. Students will be assessed based on the functionality of their games and will receive further feedback on their implementation, execution and creativity.

99-361 IdeATe Portal
Spring: 9 units
Full descriptions of each section topic are available at https://courses.ideate.cmu.edu/99-361. IdeATe Portal courses introduce students to key aspects of critical, creative, and technical practice and prepare them to engage in productive interdisciplinary Collaborative Studio coursework in IdeATe minor areas. In Section A: Garment Patterning, Construction, and Experimentation, students will create experimental pieces for the body. Section B: Intelligent Environments highlights the motivation and requirements for intelligent environments and components that could be used to add functionality to existing environments. Section D: Learning About Learning is a hands-on experiential class where students will gain knowledge, expertise, and empathy towards how humans learn, how we learn from objects, how we learn from our spaces, and how our objects and spaces learn from us.

Course Website: https://courses.ideate.cmu.edu/99-361 (https://courses.ideate.cmu.edu/99-361/)
99-362 IDeA Te: Intelligent Learning Spaces
Spring: 9 units
Intelligent Learning Spaces explores the interactions between human learning and the spaces in which learning occurs. In this project-based course, students discuss, analyze, define, and apply theory from education, architecture, and the arts to their project work. Students investigate precedents and existing experiences to create their own learning manifestos and designs. Imagination, in-class participation, speculation, empathy and 360-degree awareness are key components of this class. Students work on scaffolded projects that build on their knowledge to showcase their intentions and creativity, reacting to a variety of contexts relevant to learning. Students have opportunities to develop creative inquiry skills and apply critical perspectives through project-based work that requires experimentations, hands-on learning, reflection, and documentation.

99-363 IDeA Te: Spatial Storytelling
Spring: 6 units
Spatial Storytelling promotes the use of digital storytelling methods and methodologies across disciplinary topics. In this Spring mini, students are guided through the process from identifying a research problem, collecting data from diverse sources, learning specific geospatial mapping tools, and finally crafting narrative. They will work with spatial information (geospatial data) to build complex multimodal narratives around social issues. By the end of this course, students will know: what are spatial data, how to find and identify different types of spatial data, how to create a story based on data, and how to analyze data in geospatial software. Students will be able to develop constructive critique and data literacy skills to critically review peer work across disciplinary topics. Using competencies gained over the semester, students will create an online interactive narrative and to present it to the broader community.

99-409 Summer Research
Summer: 1 unit
This course allows undergraduate students from all fields to participate in research (including artistic/creative inquiry) under the direction of a Carnegie Mellon faculty member. Tenure track, teaching track, research track, librarian track, and special faculty may serve as research supervisors. Students should have previously participated in summer research via the Summer Undergraduate Research Apprenticeship and/or the Summer Undergraduate Research Fellowship before enrolling in 99-409 (students who are unsure of whether 99-409 is appropriate for them should consult with the Undergraduate Research Office). Students will need to complete a supervisor agreement form to be eligible for participation in this tuition-free 1-unit course. Students are responsible for finding research supervisors. In addition to the summer research with the faculty member, students will be expected to write a brief (one- to two-page) research report about their summer work. This course is not eligible for CPT for international students; please contact the Office for International Education for more information regarding CPT.