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/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.

99-153 Mindful Living
Fall and Spring: 3 units
The goal of this course is to increase students internal resources for meeting stress through mindfulness-based meditation training. Each week, students will be trained in formal mindfulness meditation practices and asked to meditate at home with the help of brief guided meditation recordings. Students will also be given weekly informal mindfulness practice suggestions to help them translate the skills of formal meditation practice into daily life. Class meetings will give students the weekly opportunity for reflection, discussion, and questions based on their experience of formal and informal practice assignments.

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.

99-236 Introduction to Environmental Ideas
Spring: 9 units
By recognizing that environmental problems are themselves complex and require insights from both scientific and social perspectives, the University-wide Minor in Environmental Studies urges students to gain proficiency in different disciplinary habits of thinking about environmental problems. This course fulfills a requirement for the University-wide Minor in Environmental Studies. This course will introduce students from any undergraduate major at CMU to key methods and approaches for inquiry in the framework of Environmental Studies. Students will build up their ability to recognize and apply diagnostic criteria; understand key principles and terms; and take part in an informed discussion about ways of seeing, and creating interventions for environmental problems as social and scientific challenges. There are no pre-requisites for this course. Students will develop skills and apply concepts to different scenarios of environmental crisis. Preference for course registration goes to students already declared for the Minor in Environmental and Sustainability Studies.

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 hands-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 all 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
PLEASE NOTE: The specific meeting dates for the A1 section of this micro course are Sep 19, Sep 26, Oct 3. 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 A1 section of this micro course are Oct 3, Oct 10, Oct 17. The specific meeting dates for the A2 section of this micro course are Nov 1, Nov 8, Nov 15. This micro course is an introduction to Computer Aided Design (CAD) and the use of laser cutters for fabrication. Students will learn the basics of SolidWorks, a popular CAD package. They will also receive hands-on training in the use of laser cutters to turn their designs into physical objects. Students who complete this course PLUS the separate fire safety training will be able to use the IDEATe facility (Hunt Library) laser cutters on their own for future course work or personal projects.

Course Website: https://courses.ideate.cmu.edu/99-353 (https://courses.ideate.cmu.edu/99-353/)

99-355 IDEATe: Introduction to Arduino
Fall and Spring: 1 unit
PLEASE NOTE: The specific meeting dates for the A1 section of this micro course are Sep 27, Oct 4, Oct 11. The specific meeting dates for the A2 section of this micro course are Nov 6, Nov 13, Nov 20. This workshop aims to demystify the Arduino microcontroller through hands-on work in the lab creating simple machines with embodied behaviors. The Arduino is a versatile resource for physical projects for students in all disciplines. This course brings students over the beginner’s threshold to a basic understanding of the use, terminology, and potential of the Arduino. The skills and concepts taught in this course are presented from an interdisciplinary approach which merges practices in arts and technology. The first portion will teach the essential skills for creating a simple sensor-driven physical computing system, and the second portion will reinforce those skills by making a simple interactive project. The course has no technical prerequisites, although uses a little bit of algebra-level math.

Undergraduate students, graduate students, faculty and staff interested in learning new skills in an interdisciplinary environment are welcome!

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 Phototography
Fall and Spring: 1 unit
PLEASE NOTE: The specific meeting dates for the A1 section of this micro course are Sep 27, Oct 4. The specific meeting dates for the A2 section of this micro course are Oct 31, Nov 7. 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.

99-361 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: Inflatables, students will focus on the design, fabrication, and creative applications of sculptural and inflatable forms created from soft materials. 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, experience, 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 IDeATe: 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 experimentation, hands-on learning, reflection, and documentation.

99-363 IDeATe: Spatial Storytelling and GIS
Spring: 6 units
Spatial Storytelling and GIS 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 present it to the broader community.

99-406 Directed Study in Education
Fall and Spring
A variety of education-focused projects are supported by this course. Students may focus on the development or improvement of an educational outreach program implemented by a university academic department, student organization or individual. The course also enables students to complete a semester-long study of a topic related to education. When registering for the directed study, students must submit a proposal for the work to the instructor. Weekly meetings between the student and instructor are scheduled. Students must prepare a final work product such as a report that documents that independent learning was achieved. For example, if the work is to determine the effectiveness of a university educational outreach program on the targeted population, the report should include information about the program, a review of literature related to the program goals, methods used to determine effectiveness (including any IRB approvals that are necessary), a summary of results, and recommendation for program improvement. Other projects may include, but are not limited to, designing and implementing a new outreach offering, or creating a more effective method for university students to learn about and participate in educational outreach programs. In-depth research about a topic related to education of children may be completed. Projects have explored topics such as programs and policies on bullying in US schools; K-12 education in public, charter, private and parochial schools; and mechanisms to help middle school students learn about careers and pathways to those careers.

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.

99-452 Language and Culture for Teaching
All Semesters: 3 units
Language and Culture for Teaching is a 3-unit pass/fail workshop to help graduate students who are nonnative English speakers begin to develop the skills needed to be successful as teaching assistants (TAs). Students will gain a better understanding of the US classroom and culturally appropriate teaching techniques as well as become better prepared to take on the role of ‘instructor’. Students will also learn how to better communicate their knowledge and expertise to learners by: 1) working on aspects of pronunciation crucial for the classroom, 2) developing an awareness of key aspects of robust teaching fluency, 3) having frequent opportunities to practice robust teaching fluency, and 4) learning compensation strategies for their individual language problems. Each student will have the opportunity to give a videotaped presentation on a topic from his or her field and then to meet with the instructor for extensive feedback and coaching. Prerequisite: Permission from the Intercultural Communication Center (ICC). Please email ICC at icc-classes@andrew.cmu.edu.

Course Website: http://www.cmu.edu/icc/ (http://www.cmu.edu/icc/)

99-530 Senior Preparation Seminar
Fall: 6 units
This mini course provides graduating seniors a chance to reflect on their experiences as students at Carnegie Mellon; intellectually, socially and as leaders in this community. In addition to its reflective component, the course will also look at how to prepare for upcoming transitions into post college roles and responsibilities. The course explores intrapersonal, interpersonal, and external factors at play for recent graduates.

99-735 Proseminar in Entrepreneurial Leadership
Fall and Spring: 1 unit
The course is a required, one-unit weekly seminar for James R. Swartz Entrepreneurial Fellows and, if appropriate, other students such as undergraduate Innovation Scholars who are interested in entrepreneurship. Location: Swartz Center in Tepper Quad - Innovation Room, Floor 3.