Note on Course Numbers

Each Carnegie Mellon course number begins with a two-digit prefix which designates the department offering the course (76-xxx courses are offered by the Department of English, etc.). 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. xx-6xx courses may be either undergraduate senior-level or graduate-level, depending on the department. xx-7xx courses and higher are graduate-level. Please consult the Schedule of Classes (https://enr-apps.as.cmu.edu/open/SOC/SOCServlet) 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/

99-102 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/

99-103 Computing @ Carnegie Mellon
Fall and Spring: 3 units
Computing@Carnegie Mellon (C@CM) is a graduation requirement for all undergraduate students. This 3-unit, pass/fail course is primarily comprised of Carnegie Mellon-specific information. It is intended to help students understand what resources are available as well as their responsibilities as users in our computing community. The course runs for half of the semester and meets twice a week for 50 minutes. Students must pass the course with at least a 75% grade based on exams, homework assignments, a group presentation and attendance. Incoming students are expected to take C@CM during the fall semester. Mini 3 and 4 sections are reserved for spring transfer students and those that did not successfully complete the course previously. There are no test-out options and Advanced Placement, International Baccalaureate or college-level computing courses cannot be substituted for this requirement. C@CM is formerly known as Computing Skills Workshop (CSW).
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.

99-200 Tutoring, Mentoring and Role Modeling--A Community Service Course
Spring: 9 units
99-200 Tutoring, Mentoring and Role Modeling--A Community Service Course This course has service, intellectual, and personal goals. Its service goal is to provide effective tutors, mentors, and role models to local public school children. Students meet for class once/week and tutor 26 hours during the semester in programs that provide an opportunity to share talents and skills in the community. To promote effectiveness, the course includes topics of tutoring (making tutoring interesting and creative, focusing on meta-learning strategies and study skills); mentoring (exploring multiple mentoring models and the mutual benefits of a mentoring relationship); and informed citizenship (gaining a broader understanding of the issues that urban kids face, exploring how public policies affect the disparities between urban and suburban school student performance. The course also investigates the reasons that “supplemental educational services” are a $27 billion/year industry in the United States -- Why are so many students in need of extra help? Tutors learn that they can be effective in helping younger students, and that it is personally rewarding to do so, and express that it is refreshing to step outside the grind of Carnegie Mellon life and do something meaningful in the community.

99-238 Materials, Energy and Environment
Fall: 9 units
The survival of humans and the advancement of civilization and culture are a result of mankind’s continued development of materials. From early times, civilizations with the most advanced materials have dominated the history of warfare and have been responsible for the infrastructural developments that have cradled out societies. As a result, materials have been influential in the trade and commerce between societies and are still to this day, strongly involved in the political, economic and social conflicts worldwide. Materials do not stand alone in development however, they are a result of, or are influenced by, technological needs and developments. The more advanced the material, the more energy and effort is required for its production. In the US, the production of materials accounts for about 90% of the country’s energy usage. This fact clearly indicates a strong tie between materials and energy, and without energy, technological developments based on material advancement will not occur. In our world today, the need to provide improved performance, economics and design in consumer goods comes as a direct result of the market conditions established by consumers. Material selection and design therefore is driven by application and consumer needs which implies that the consumer has a large influence on material consumption. Material selection and material usage in turn have major ecological implications in energy, material resources and direct environmental impact. Awareness of the complicated interaction is paramount for continued development of civilization. With the scale of industrialization that exists on our planet, consideration of resource management, ethical material selection choices, energy management, and final disposal are all necessary to ensure a sustainable future.

99-241 Revolutions of Circularity
Fall: 9 units
In this course we will investigate how the apparently simple concept of circularity (both in stillness and in motion) has accreted meaning. Starting with the circle as presented in early geometry, we will encompass circularity in ancient and Renaissance astronomy as well as classical physics. We will also discuss appearances of the circle in literature, philosophy, and art since our study will reveal connections such as how Aristotle’s views on nature influenced Ptolemy and an understanding of our place in relation to the world, including central imagery in the poetry of Donne. As we demonstrate proofs and analyze texts, circularity will emerge not only as a device through which intellectual revolutions have occurred, but also as an object that has itself been transformed over the centuries.
99-242 Meaning Across the Millennia
Spring: 9 units
Is it possible to convey messages that remain comprehensible after immense time, in the face of inevitable cultural shifts and physical decay? In this course, students will come to terms with the technical and philosophical aspects to this problem while working on group projects to propose solutions to the preservation of memory. Along the way, we will identify the challenges in extracting meaning from artifacts, both ancient and contemporary, such as documents and monuments, whether intentional or unintentional. We will also confront ethical and esthetic issues in identifying what is worth preserving, the challenge of societal pressures on past projects, the possibility of future indifference, and the question of what purpose this endeavor may serve for present-day humanity. Case studies will include time capsules such as those created by the Westinghouse Electric Manufacturing Company for the 1939 and 1964 New York World’s Fairs; the proposed warning marker system for the U.S. Department of Energy Waste Isolation Pilot Plant; the Voyager Golden Records launched aboard two interplanetary probes; and attempts at communication with extraterrestrial intelligence.

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 (http://www.cmu.edu/acadev/studentjobs/peertutor.html) and then be interviewed by the instructor(s) to determine if the student possesses the basic qualifications.

Course Website: http://www.cmu.edu/acadev/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) 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 nine 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 (http://www.cmu.edu/acadev/studentjobs/sileader.html) and then be interviewed by the instructor(s) to determine if the student possesses the basic qualifications.

Course Website: http://www.cmu.edu/acadev/studentjobs/

99-252 Seminar for Academic Counseling
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 Counselors (AC’s). Throughout the course, students will be exposed to the mission and goals of Academic Development and the Academic Counseling 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 (http://www.cmu.edu/acadev/studentjobs/academiccounselor.html) and then be interviewed by the instructor(s) to determine if the student possesses the basic qualifications.

Course Website: http://www.cmu.edu/acadev/studentjobs/

99-415 Internship in Educational Outreach
All Semesters