CMPS 10
Introduction to Computer Science
Summer 2011

This course is an introduction to the fundamental concepts, topics, and methods of computer science. History of computer science, problem solving, compelling applications and issues of current interest will be discussed. Structured problem solving through design of pseudo-code and algorithms will be introduced. Appreciation and fun of computer science will be pursued through Scratch Programming. While there are no prerequisites, this is a computer science course, and not a computer literacy course. In other words, we will cover some challenging material with a fair amount of abstract mathematical content. Students interested in a more leisurely introduction to computers should consider taking CMPS 2 (Computer Literacy) or CMPE 3 (Personal Computers).

**Time and Place:** TuTh 1:00-4:30 pm  Physical Sciences 140
**Class Webpage:** [http://www.soe.ucsc.edu/classes/cmps010/Summer11/](http://www.soe.ucsc.edu/classes/cmps010/Summer11/)

**Instructor:** Suresh Lodha ([http://www.soe.ucsc.edu/~lodha/](http://www.soe.ucsc.edu/~lodha/))
**Email:** lodha@soe.ucsc.edu
**Office:** E2 361
**Office Hours:** TuTh 4:30-5:30pm+, or by appointment
**Phone:** 831-459-3773

**Course Assistant:**
Helene Chan <hxchan@ucsc.edu.

**Secondary Labs:** The purpose of the secondary lab sections is to provide help with lab assignments as well as to provide facilities for you to work on the Lab Assignments. **Attendance at the secondary labs is entirely optional.**

**Lab Times:** Social Sciences I PC Lab: MW 4:00-5:00pm, TuTh 4:30-5:00pm

**Text:** *An Invitation to Computer Science*, by G. Michael Schneider & Judith L. Gersting, published by Course Technology. You may purchase either the fifth or fourth (C++) edition. We will cover roughly:
- 4th ed.: chapters 1-4, and parts of chapters 8, and 11
- 5th ed.: chapters 1-4, and parts of chapters 9, and 12

**Evaluation:** The work in this course will be weighted as follows:

<table>
<thead>
<tr>
<th>Class Presence</th>
<th>Required</th>
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<tbody>
<tr>
<td>Programming</td>
<td>49%</td>
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<tr>
<td>(4 Lab Assignments roughly 7, 7, 12, 16; programming presentation 7)</td>
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<tr>
<td>Presentation (on readings)</td>
<td>7%</td>
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<tr>
<td>Class Participation/Homework on Readings</td>
<td>7%</td>
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<tr>
<td>Quizzes</td>
<td>12%</td>
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<tr>
<td>(3 quizzes roughly 4, 4, 4)</td>
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<tr>
<td>Final Exam (on July 21)</td>
<td>25%</td>
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Class presence is required. Prior information and approval from the instructor is required for every absence (or systematic late arrival or early departure). There will be four programming assignments due on June 28, July 5, July 12 and July 19. There will be three quizzes on June 30, July 7, July 14, and a final examination on July 21. There will be two group class presentations: one related to scratch programming and another related to reading/video assignments.
Homework (theoretical) will be assigned for the purpose of quiz preparation. Solutions will be provided and discussed in the class. Theoretical homework is not required to be submitted and will not be evaluated. Lab Assignments are designed to have fun with scratch programming. These assignments will either be graded in person by the course assistant and/or required to be turned in through your UCSC computer account via the submit command, which will be described in the first lab assignment. Please do not attempt to turn in any lab assignment by email. No credit will be given for such work. Quizzes will be given in class. There will be no mid-term examination. The Final Exam will be held on July 21, Thursday during class time. Please be sure to be available on that day. No early or late final exam will be given. No late homework will be accepted. No makeup labs will be given. No make-up for the quizzes will be given except when required by law or in the event of a medical or family emergency. No incompletes will be given.

The grading scale for the class will be approximately: A+: 100+ (through bonus points); A: 95-100; A-: 90-95; B+: 85-90; B: 80-85; B-: 75-80; C+: 70-75; C: 65-70. Passing grade is (i) a minimum score of 30 in programming out of 49, (ii) a minimum score of 30 in the rest of the course out of 51, and (iii) a minimum total score of 65. Bonus points will be used to improve the grade at most by one step, for example, from B to B+.

Getting a UCSC Computer Account:
It is a requirement of this course that each student have an active UCSC computer account. If your account is not already activated, go to the UCSC portal: http://my.ucsc.edu, and log in using the User ID and Password that were sent to you by the Registrar's Office, then follow the link labeled Activate UCSC Account. Attend one of our scheduled lab sessions to learn how to log on to your UCSC computer account once it has been activated.

Accommodations for Students with Disabilities
If you qualify for classroom accommodations because of a disability, please get an Accommodation Authorization from the Disability Resource Center (DRC) and submit it to me in person within the first two weeks of the quarter. Contact DRC at 459-2089 (voice), 459-4806 (TTY), or http://drc.ucsc.edu for more information on the requirements and/or process.

Academic Honesty:
The Baskin School of Engineering has a zero tolerance policy towards any incident of academic dishonesty.

What is cheating? In short, it is presenting someone else’s work as your own. Examples include (but are not limited to) copying another student's lab assignment, program, quiz, or exam, allowing your own work to be copied, or in any way facilitating the cheating of others. Although you may discuss problems with fellow students, your collaboration must be at the level of ideas only. Legitimate collaboration ends when you "lend", "borrow", or "trade" written solutions to problems, or in any way share in the act of writing your answers. You may freely give and receive help with the computer facilities, editors, the UNIX operating system, and the proper use and syntax of the C++ programming language; but you may not copy, paste, email, or in any way share any file which is submitted as part of a lab assignment. In particular you may not share source code. If you do collaborate (legitimately) or receive any form of help from anyone, you must credit them by placing their name(s) at the beginning of your assignment.

Please go to http://www.ucsc.edu/academics/academic_integrity/ to see the full text of the University's policy on Academic Integrity.