CS 5040: Teaching Introductory Computer Science

Administrative Details and Syllabus
Fall 2020

Course Information

Course catalog description. Issues confronted by undergraduate teaching assistants (TAs) in introductory computer science courses, including leading lab sections, conducting office hours, grading assignments, communicating with students.

Who can take CS 5040. All undergraduates newly hired as TAs this semester are required to enroll in CS 5040. Undergraduates who have served as TAs prior to this semester should contact the instructor before enrolling.

Purpose of CS 5040. The discussions, reading materials, and assignments of CS 5040 are designed to train undergraduate TAs to be effective and efficient in their positions, while remaining successful in their own academic coursework. CS 5040 also facilitates the formation of a supportive cohort of undergraduate TAs in the School of Computing (SoC), members of which can be called on to answer questions and share experiences.

Combined credit. CS 5040 is 1 credit and may be combined with other courses (such as CS 3011 and 3020) to form a 3-credit elective for the CS degree.

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Course Schedule

Meeting times. All SoC TAs must be available the week before the start of classes. CS 5040 convenes the week of August 17-21 to cover the majority of the course material. CS 5040 also meets for several follow-ups during the fall semester (dates and times TBD, according to student availability).

Presentation of topics. CS 5040 material includes the following topics:

• Typical TA duties
• Performance evaluations of TAs by instructors
• Polices and rules for TAs
• What instructors provide to TAs and questions to ask instructors
• Classroom demeanor
• Teaching lab / discussion sections
• Overcoming barriers to communication
• Encouraging interaction
• Conducting “help” hours
• Time management
• Effective grading
• Answering student questions outside of class
• Being the TA of near peers
• Presentation skills
• Discrimination and ADA accommodations
• Students in distress
• Sexual misconduct reporting
• Implicit bias
• Helping students remotely
• Lessons learned from observing other TAs and being observed
• Reflecting on the TA experience and staying motivated

The coverage of topics via meetings and other class activities is given by the schedule in the Canvas course for CS 5040.

Course Materials

Textbook.  The Torch or The Firehose: A Guide to Section Teaching by Arthur Mattuck is a free, online textbook available at [http://tinyurl.com/jw2gwh4](http://tinyurl.com/jw2gwh4) Please note that this guide was written for TAs at MIT who lead recitation sections. While the job of being a TA for introductory courses at the UofU is somewhat different, much of the information and advice is still applicable. Reading from The Torch or The Firehose is assigned regularly in CS 5040; however, students are encouraged to read the entire guide (about two hours of reading) as soon as possible. Other freely available articles and videos are included in reading assignments.

Course website. The class website is a Canvas course available through CIS. It contains the schedule of class meetings, discussion topics and reading assignments, as well as assignment specifications.

Student Evaluation

Assignments. A number of Canvas quizzes and assignments are given throughout the semester. The specifications of each assignment and its due date are posted in the class schedule. There are no tests or exams in CS 5040.

Evaluation. Each CS 5040 assignment is evaluated by the instructor using the UofU criteria for letter grades:
A, A- excellent performance, superior achievement
B+, B, B- good performance, substantial achievement
C+, C, C- standard performance and achievement
D+, D, D- substandard performance, marginal achievement
E unsatisfactory performance and achievement

Numerical grades are not used. Students who wish to appeal a grade on an assignment must do so within one week of receiving the grade. At the end of the semester, a student’s course grade is determined by the performance on all assignments, as well as overall participation and contribution.

Course Guidelines

Working together. Students are encouraged to discuss assignments with fellow classmates, but each student is responsible for writing his/her own answer. Cheating is: sharing written or electronic work either by copying, retyping, looking at, or supplying a copy. Cheating is not: discussing concepts, answering questions about concepts or clarifying ambiguities, or helping someone understand how to use the class tools and software.

UofU Student code. All students are expected to maintain professional behavior, according to the University of Utah Student Code at http://www.regulations.utah.edu/academics/guides/students/studentRights.html. Students should read the Code carefully and know that they are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee.

Other policies and guidelines. CS 5040 students are also bound by the following policies and guidelines:

- The College of Engineering Semester Guidelines (http://www.coe.utah.edu/students/academic-affairs/academics/semester-guidelines)

Students should thoroughly read and understand each of these documents, asking questions as needed.