

Syllabus

CSC140 Foundations of Computer Science

Instructor: Sikder Huq

Block 2

September 24, 2018 to October 17, 2018

1 Our meeting times and places

- My office is in Law 206D.
- You may send me electronic mail at SHuq@cornellcollege.edu.
- You may call me in my office at (319) 895-4105.
- We will all meet together in the classroom in the mornings and in the laboratory in the afternoons.
- I will be in my office and available to meet with you Monday through Friday after the lab sessions (typically from 3:00 p.m. until 3:30 p.m) and by appointment.

	Where	When
Classroom	Law Hall 121	9 a.m. to 11 a.m.
Laboratory	Law Hall 113	1 p.m. to 3 p.m.

2 Textbook

We will use a free, online, interactive textbook.

Click on the link. Create an account for yourself. The name of our course on the Runestone Academy site is CSC140. Enter that name when you create your account.

- [How to Think Like a Computer Scientist](#)
Brad Miller, David Ranum, Jeffrey Elkner, Peter Wentworth, Allen B. Downey, Chris Meyers, and Dario Mitchell
Runestone Interactive 2014

Note: We will learn through reading, discussion, and through practice solving problems. You will discover that practice writing programs is the most productive method of learning in this course. Reading and discussion can help you prepare for the exercises. The discoveries that you make during the exercises will increase your understanding of what we read and discuss. Practice on the computer is indispensable.

3 Other Resources

Check Moodle regularly for other resources.

You may use the computers in our laboratory or your own computers for the exercises.

The software that we will use is available at no cost on the Internet. Versions are available for computers that run the Microsoft Windows, Apple Macintosh OS X, and Linux operating systems.

4 Course Web Page

Homework assignments, lecture notes/slides, and announcements will be posted in Moodle.

Daily lecture/activity summaries will be posted in the following Web page:

<https://sites.google.com/site/saikatcit05/teaching/fall18csc140>

5 Course Objectives

We will give special attention to three of Cornell College's **missions, values, and educational priorities**:

- **Knowledge:** After successful completion of this course, you should be able to:
 - Think computationally and solve problems using programming
 - Break down a problem into simpler subproblems
 - design algorithms and translate them into programs
 - understand time efficiency and memory usage of programs
 - understand the idea of object-oriented programming

- **Reasoning:** You will learn how to apply reason in the design, development, and testing of software.
- **Communication:** You will learn how to communicate with clients and teammates. This includes how to communicate technical ideas using pseudocode and programming code.

6 Grades

You are expected to participate in the discussions and work actively in the laboratory. There will be in-class quizzes/exercises to verify your understanding of the materials presented in class.

We will solve different problems in lab and write programs. There will be 5/6 lab assignments and 2 programming projects.

Grading of this course will be based on the following components:

Activity	Points
Participation and in-class quizzes/exercises	5
Programming/Lab Assignments	25
Exam 1 (Tuesday, 2 October, 2018)	10
Exam 2 (Tuesday, 9 October, 2018)	10
Exam 3 (Wednesday, 17 October, 2018)	15
Lab Exam (Tuesday, 16 October, 2018)	10
+ Two Projects	25
	100

Note that the dates mentioned above are tentative.

The final grade will be assigned according to the following percentages: 90 A, 85 A-, 82 B+, 78 B, 75 B-, 70 C+, 65 C, 60 C-, 55 D+, 50 D, 45 D-, <45 F.

The grades of the exams might be curved to calibrate for the difficulty of the exercise relative to course objectives; your curved grade will always be equal to or higher than your raw points. The instructor reserves the right to adjust the weights and percentages if it is appropriate and will notify students if these adjustments occur.

7 Etiquette for the Classroom

Please show respect to your classmates, to me, and to the seriousness of our enterprise by exercising the following courtesies:

- Please give your attention to whomever is speaking. You cannot view unrelated pages on the Web and be part of our class' discussion at the

same time.

- You learn from your classmates. Be generous in offering help to classmates in the laboratory. Take interest in your classmates' work. Encourage them. Compliment them for work that is well done. Give them a good audience when they stand at the front of the room to present their work. Show these courtesies to all of your classmates.
- Please do not interrupt the class by late entries or early departures. If you anticipate a need to be absent from all or part of one of our meetings, please notify me in advance of your anticipated absence.
- You may listen to music while working in the laboratory so long as you are still able to hear your name when called and you do not disturb neighbors.
- Please refrain from bringing food or drink into the classroom or laboratory. We can make reasonable exceptions for eating that is not noisy and foods that do not have strong smells.

Acceptable beverages and foods include water, tea, and granola bars. Bringing breakfast to class is not courteous.

Please clean up crumbs and spills. Please dispose of empty containers and leftovers.

- Please dress as you might for an employer in the software engineering industry. Please keep your shoes on. Wearing hoods, hats, or sunglasses (except when there is a medical reason for shielding the eyes) that hide your face is not courteous.
- Imagine that you are seeking employment. How will you present yourself to your prospective employer?

Imagine that you are now employed in a software engineering firm. How will you speak to your teammates, the head of your team, and your company's clients?

Imagine that your grandmother has purchased the company for which you work. She has joined you in the company's conference room to hear and see you walk through the code that you have written for the company (her company).

Are there some words that you will keep out of your vocabulary during this hour?

8 Policies

Academic Honesty expectations: Cornell College expects all members of the Cornell community to act with academic integrity. An important aspect of academic integrity is respecting the work of others. A student is expected

to explicitly acknowledge ideas, claims, observations, or data of others, unless generally known. When a piece of work is submitted for credit, a student is asserting that the submission is her or his work unless there is a citation of a specific source. If there is no appropriate acknowledgement of sources, whether intended or not, this may constitute a violation of the College's requirement for honesty in academic work and may be treated as a case of academic dishonesty. The procedures regarding how the College deals with cases of academic dishonesty appear in The Catalogue, under the heading "Academic Honesty."

Students with disabilities: Cornell College makes reasonable accommodations for persons with disabilities. Students should notify the Coordinator of Academic Support and Advising and their course instructor of any disability related accommodations within the first three days of the term for which the accommodations are required, due to the fast pace of the block format. For more information on the documentation required to establish the need for accommodations and the process of requesting the accommodations, see <http://www.cornellcollege.edu/academic-support-and-advising/disabilities/index.shtml>.

This course supports the Educational Priorities and Outcomes of Cornell College with emphases on knowledge, inquiry, and citizenship.