Welcome To CMPU 145-51 —
Foundations of Computer Science
Vassar College, Spring ’16

Course: CS 145-51 — Foundations of Computer Science
Lecture: M / W 1:30–2:45 PM, meetings in SP 105.
Lab: F 1:30–2:45 PM, meetings in SP 309.
Website URL: http://www.cs.vassar.edu/~cs145/Section51

Course Description

Introduces the theoretical, structural and algorithmic foundations of computer science. Topics include: sets, relations, functions, recursive data structures, recursive functions, induction, structural induction, probability, logic, and proving program correctness. Concepts are reinforced by regular programming assignments. A weekly laboratory period provides guided hands-on experience.

Prerequisites: CMPU 101. CMPU 145 and 102 (CS II: Data Structures and Algorithms) may be taken in either order or concurrently. CMPU 145 and 203 (CS III: Software Design and Implementation) may be taken in either order or concurrently.

Your Professor: Eric Aaron
Website: http://www.cs.vassar.edu/~eaaron
Office: SP 305
Office Hours: M 3:00–4:00 PM, Tu 3:00–4:00 PM, and by email appointment (but may change)
Phone/Voicemail: (845) 437-7293
E-mail: eaaron@cs.vassar.edu
NB: The above email address is the best way to contact me.

Course Coaches
Atticus Kramer — atkramer@vassar.edu
Madeline Lansbury — malansbury@vassar.edu
Thao Nguyen — thanguyen@vassar.edu
George Whiteside — gewhiteside@vassar.edu
James Kelly — jamekelly@vassar.edu (half-time)
Kelly Yu — keyu@vassar.edu (half-time)

Coaching hours TBA

Your textbook

• Sets, Logic and Maths for Computing, 2nd Edition by David Makinson.

Grading: Your grades for the course will be computed (roughly) based on

• Problem Sets: 43%
• Exams (1 midterm; 1 regularly scheduled final exam): 50%
• Labs and Class Participation: 7%

The above percentages may be changed slightly if administrative concerns demand it.
Lectures, Labs, and Classroom Accountability

All students are responsible for ALL information given in class, whether or not it is presented in any other form (handout, course website, textbook, etc.). Thus, although lecture attendance is not mandatory, it is strongly encouraged, and it is essential that students who miss lecture consult classmates and find out about any information—academic, administrative, or other—that they missed. There may be severe, unintended consequences for students who do not keep up with all information from class. It is your responsibility to see that this does not happen to you. The easiest way to ensure it: Attend every lecture. (If low lecture attendance becomes a problem, your professor reserves the right to make lecture attendance mandatory for the remainder of the course.)

Attendance at labs is mandatory.

Students are also advised to use class lecture notes and the course textbook as complementary sources of information; in cases of discrepancy, please notify your professor immediately.

As a courtesy to your classmates and your instructors, the use of computers, iPads, mobile phones, or other electronic devices during lectures is discouraged. If for any reason it is important that you use such a device during lecture, please talk to me about how we can best accommodate you.

Homework Policies

Electronically submitted assignments such as programs are typically due by the end (11:59 PM) of the specified due date. Assignments turned in on paper (printouts of programs, mathematical proofs, etc.) may instead be due by the beginning of class (e.g., 1:30 PM for lectures) on the specified due date and should be turned in directly to me; such assignments received after the beginning of class may be considered late (in particular, assignments left in my office after I leave it for class, whenever that might be, will be considered late). Late assignments will not be accepted for credit (but please turn them in anyway—see below!).

When computing your final grade for the course, your lowest homework score from among the homeworks that were turned in (on time or late) will be dropped.

As with all policies, homework policies are intended to be fair to everyone involved in the course. They will be enforced fairly. Please feel free to ask me any questions about specific cases that may emerge over the semester.

Statement regarding Accessibility and Educational Opportunity

Academic accommodations are available for students registered with the Office for Accessibility and Educational Opportunity. Students in need of ADA/504 accommodations should schedule an appointment with me early in the semester to discuss any accommodations for this course that have been approved by the Office for Accessibility and Educational Opportunity, as indicated in your AEO accommodation letter.

Policy on Collaboration and Academic Integrity

Your CS145 homework will include both programming exercises (in the Scheme programming language) and non-programming exercises (typically involving writing proofs). On homework exercises where collaboration is permitted, you are encouraged to discuss ideas and approaches to solving problems on a general level with your classmates (as well as your professor and your CS145 Coaches, of course!). You may not, however, discuss specifics with your classmates. As part of this, in cases of collaboration, if you know the answer and a classmate does not, telling them the answer is a violation of class policy; if a classmate needs further assistance, he or she should see your professor or a CS145 Coach.

In particular, you should never share or copy code, solutions, or files unless explicitly allowed by your professor to do so. One implication of this—on a homework exercise, YOU MAY NOT LOOK AT A SCREEN TO SEE THE CODE OF A CLASSMATE. In addition,
you may not use code from sources other than those explicitly given as course resources, including
online sources, unless explicitly authorized.

In general, receiving and copying solutions (code, pseudocode, proofs, etc.) from any source (a
classmate, a friend, a published text, an online source, etc.) is disallowed; note that using code or
other material from sources (other than those explicitly given as course resources) as “inspiration”
and submitting highly derivative solutions is viewed as copying. (Please read Originality and Attri-
bution: A guide for student writers at Vassar College, available from Vassar’s Dean of the College
website.) Furthermore, on each submitted assignment, you should always cite and acknowledge
sources from which you receive assistance, including your textbook, your CS145 Coaches, or your
classmates.

On exams, collaboration will not be allowed unless explicitly indicated by your professor.

In general, the highest level of academic integrity is expected of every student in this class. If
there are any questions about collaboration or related policies, please come talk with me!