

CMPSCI 120: Introduction to Problem Solving with the Internet Fall 2009

<http://www-edlab.cs.umass.edu/cs120/syllabus.pdf>

Course Overview: This course will provide non-CMPSCI majors with the basic skills needed to use the internet effectively. We will discuss keeping yourself safe online, various forms of online communication, searching and finding information and other resources online, web page construction, JavaScript programming, and social and legal issues pertaining to the internet. I am open to student suggestions for topics they would like to learn about in this course.

Instructor: Rick Adrion. Office: CMPS 310. Email: adrion@cs.umass.edu. Please include the words "CMPSCI 120" in the subject line, that way I can immediately identify messages pertaining to this class.

Teaching Assistant: Yariv Levy. Office: typically meets students at Jones Library or in the CMPSCI grad lounge. Email: ylevy@cs.umass.edu

Rick's assistant: Wendy Cooper. Email cooper@cs.umass.edu. Rick & Wendy can be reached at 413-545-2475

Meeting Times: This course meets on Tuesdays and Thursdays from 2:30PM to 3:45PM in room 142 of the Computer Science Building.

Honors Section [1 CR]: This Honors course is designed to combine community service learning with a mechanism for reinforcing learning through tutoring. The Honors students will tutor students at Holyoke Community College (HCC) enrolled in a one-hour-per-week, seven-week Web design class, "IT is all about me." Tutoring will occur at 2-3 in-person visits to HCC and via phone, email, text messaging, etc. Each student will attend a two-day training session at the Learning Resource Center and take a refresher course every month. Students will prepare a self-reflexive paper that discusses the tutoring experience, comments, outcomes and suggestions about the experience and improvements. Students fluent in Spanish or Russian particularly are encouraged to enroll.

Office Hours: Mondays 2-3p (begin 9/14) Tuesdays 4-5p (begin 9/15) in my office, CMPSCI 310. I am also available immediately after class for quick questions. If you have a short question (a minute or so), feel free to drop by my office any time. If you cannot find me, my assistant, Wendy Cooper (cooper@cs.umass.edu) can find me and/or make an appointment. Please email me or Wendy if you can't make regular office hours, and we will set up an appointment. Don't be shy about doing this; I always set aside some extra time for these "unscheduled" office hours.

My standard policy is to answer questions related to the course content by copying the online class discussion group (cmpsci-120-01-fal09@courses.umass.edu). This reduces the number of duplicate replies required and makes sure that everyone receives the same information. If you have a personal, e.g., related to grades, absences, etc., please try to talk to me in person.

Prerequisites: Some hands-on experience with PCs, Macintoshes, and/or UNIX. No programming experience required. You should understand the basics of using a computer, a web browser (e.g., Internet Explorer, Firefox, Mozilla, Opera, Safari, etc.) and a text editor.

Other Requirements: Since this course is all about computing and the internet, you will need regular access to a computer connected to the internet. A portion of the work for this class will be done on a web-hosting server in the CMPSCI Ed Lab. The Computer Science Educational Laboratory sports 30 iMACs (triple bootable with MACOS/Windows/Linux) and 7 Linux PCs (for remote access only) all supported by several servers. Information: <http://www-edlab.cs.umass.edu/>. The Edlab is located in rooms 223 and 225 in the Lederle Graduate Research Tower ([LGRT](#)) which can be found in the middle-top of campus on this [map](#).

You will need to install SFTP (secure file transfer) and SSH (secure remote login) software. We will cover use of these in the first few classes. You can obtain these at: <http://www.oit.umass.edu/software/download/index.html>

All registered students should have an EdLab account, where your username is the same as UMass OIT account (name, where name@student.umass.edu is your OIT account). The initial password is ELxxaaa (where xxx is the last 3 digits of your UMass ID number and aaa is the first 3 characters/digits of your username). You should change your password **immediately**.

See below for more EdLab information.

Texts:

Required

JavaScript by Example By Ellie Quigley - Prentice Hall PTR (2003) - Paperback - 752 pages - ISBN 0131401629 Around \$27-56 on various online sites; \$37.50 (used)/\$49.99 (new) at the UMass Bookstore

Recommended, not required (they will also be on reserve)

Head First HTML with CSS & XHTML By Elisabeth Freeman, Eric Freeman - O'Reilly (2005) - Paperback - 658 pages - ISBN 059610197X Around \$20 on various online sites; not available at the UMass Bookstore

Web 101 By Wendy G. Lehnert, Richard Kopec - Addison-Wesley Longman, Incorporated (2007) - Paperback - 895 pages - ISBN 0321424670 Around \$55-110 on various online sites; \$78 (used) at the UMass Bookstore

Note: You will be able to use the JavaScript textbook during the third exam (during finals week). We will not be using the JavaScript textbook until the last half of the course, **but** last spring the book **sold out** in all local bookstores before the final.

Course Work and Participation: There will be a number of homework assignments (no more than ten). Parts of the assignments will be written and parts will be electronic (webpage creation and JavaScript programming). The written portions will be submitted by email to the TA. **Late assignments will not be accepted** (so just turn in whatever you have done by the due date). You will not receive any credit for solutions we cannot read.

There will be three exams, all equally weighted. The first two exams will be given during regular class periods; the third exam will be given in our assigned time slot during finals week. This third exam will not be comprehensive; it will cover only material discussed since the previous (second) exam.

A 25% of your final grade will come from the final project. This is a website development project that will be discussed in detail a few weeks into the course.

Assignments and Grading: Assignments will be handed out in class and/or posted on the class webpage. You should check the class webpage regularly for updates. You are responsible for changes announced in class or on the webpage.

Exams (3); 35% total

Final Project; 25%

Homework; 40% total

Grades of A-, B-, C-, D- are guaranteed with averages of 90%, 80%, 70%, 60%, respectively. Grades are not curved; your grade is based on your demonstrated mastery of the material, and is not influenced by the abilities or lack thereof of your fellow students. Note: You must make a good-faith attempt at the final project in order to pass this class. In other words, regardless of your overall numeric grade in the class, you will not pass without completing the final project.

Class Participation and Attendance: I encourage students to ask questions during class. Please do not be shy about this; if you are confused about something, it is likely that one or more of your classmates are as well. I expect you to be active during class by asking questions when you have them, and answering questions I may ask of you. There will also be an online class discussion group (see below). If you are shy about asking questions in class, you can use this resource.

While there is no required attendance policy, you are responsible for all material covered in class. Additionally, because of the speed at which we will cover material and the limited number of office hours, office hour time cannot be spent simply re-teaching an entire lecture if you miss one. While I plan to make recordings of the lectures, there is no guarantee that our capture system will work every time. Therefore, I strongly urge you to attend all classes. And finally, although failure to attend class may not result in a poor overall grade, the goals of higher education — which extend beyond grade-point averages — are achieved through a dialogue that can exist only when student and teacher have made the commitment to participate.

Online Discussion Group: There is an email mailing list set up for this class. The address is: cmppsci-120-01-fal09@courses.umass.edu. All emails sent to this email address **will be sent to all students in the class**, the instructor, and the teaching assistant. This list is created automatically using your student.umass.edu email addresses, so please check your student email regularly. When you post a message to the list, make sure you are writing from your student.umass.edu mailing address, or else the message may be automatically rejected. Please use the mailing list for asking **general** questions related to the content of the course rather than emailing the instructor or TA. This way, there are around sixty people available to answer your question instead of just two. Students are encouraged to answer each other's questions on the list.

Please think before posting to these groups. For example, a good item to post would be asking for clarification about something from lecture, while not-so-good item would be asking "What's the answer to homework question number 3?"

Excused Absences and Late Work: Excused absences are those due to serious illnesses, a death in the immediate family, religious observation, or other approved extenuating circumstances. H1N1 is expected to infect up to 45% of students. If you have flu, you are advised to stay home and not attend class. Class and exam absences due to H1N1 will not require a doctor's excuse, however please try to inform Rick or Yariv if you have flu symptoms as soon as possible.

Late homework will not be accepted under any circumstances. If you know you are going to be absent, homework may be turned in early. For excused absences, the homework assignment in question will not count in the grade calculations.

Make-up exams will only be given in cases of excused absences on the day of the exam. It is the student's responsibility to inform the instructor of any intended absences for religious observances (or other foreseen circumstances) in advance. Notice should be provided as soon as possible but no later than one week prior to the exam.

Students claiming an excused absence from an exam due to unforeseen events must apply in writing and furnish documentary support (such as from a health care professional who treated the student) for any assertion that the absence qualifies as an excused absence. The support should explicitly indicate the dates or times the student was incapacitated due to illness. Self-documentation of illness (except for H1N1) is not sufficient support to excuse the absence. The instructor is not obligated to offer a make-up exam unless the failure to perform was due to an excused absence.

Students wishing to turn in the final project late due to the extenuating circumstances described above should speak to the instructor. Otherwise, no late submissions will be accepted.

Students with Disabilities: If a student has a documented learning or physical disability, all reasonable efforts will be made to meet the individual needs of that student. If you need special accommodations, please make an appointment (within the first two weeks of classes) with the Rick Adrion or Yariv Levy to discuss your needs.

Academic Honesty: Students should talk to each other about the subject matter of this class and help each other. It is fine to discuss the assignments and ask questions about them. I encourage such questions in class, in office hours, or on the class discussion group, as well as elsewhere. There are also various books and online resources available. While using these resources to help you understand concepts is fine, there is a line past which you must not go, e.g., copying someone else's work — including computer code — without acknowledging the source is plagiarism. This is a serious academic violation, likely to result in failure of the course or worse. If a significant part of one of your solutions is due to someone else or something you've read, then you must acknowledge your source. Furthermore, everything you turn in must be written by yourself, in your own words. You may get an idea from somewhere or someone and acknowledge that, but you must still understand it and explain it yourself. A copied solution, even with the source acknowledged, will be considered plagiarism. The exception is if it is in quotation marks and cited specifically. But in this case, don't bother

because you won't get credit for quoting someone else's solution. This class will comply with the academic honesty policy and student code of conduct available at:

http://www.umass.edu/dean_students/codeofconduct/acadhonesty/

http://www.umass.edu/dean_students/codeofconduct/

Topics covered: The following list of topics is tentative, and may change due to student interest. For the early classes (first half), class meetings will focus on "book" topics on Tuesdays, and webpage-related topics on Thursdays.

- Introduction (history, overview of computing and the internet)
- Safety and Privacy Online (AUPs, passwords, hackers, scams, viruses, phishing, identity theft, etc.)
- Email (how it works behind the scenes, protocols, folders and filters, spam, etc.)
- Virtual Communities & Web 2.0 (email lists, message boards, instant messaging, blogs, wikis, etc.)
- Searching the Web (search engines, query construction, assessing credibility, etc.)
- Software on the Internet (types of software, finding, downloading, installing, etc.)
- Encryption (private-key encryption, public-key encryption, digital signatures, etc.)
- Legal and social aspects of the internet.
- Webpage Construction (HTML)
- JavaScript (adding interactivity to your webpages with programming)

EdLab Information: The EDLAB is scheduled to open TBD. Go to the edlab homepage for important information: <http://www-edlab.cs.umass.edu/>

The current hours are:

M-Th 9:00 AM - 10:00 PM

Fri 9:00 AM - 5:00 PM

Sat 1:00 PM - 5:00 PM (possible closing after March 1st, see future email)

Sun 1:00 PM - 10:00 PM

The IMAC workstations are (triple bootable with MACOS/Windows/Linux):

edmac1 - edmac29

The Linux workstations are (for remote access only):

elinux1 - elinux7

All students will have an account. Most account names are the same as your OIT username (not your cs department username if you have one). In case of name conflict some usernames will be first character of the first name appended by the lastname (truncated at 8 characters).

Example: tkellogg - for Terrie Kellogg.

If this combination is not unique, you will need to get your username from the roster sent to Rick.

The initial passwords will be ELxxxaaa - where xxx is the last 3 digits of the ID number, and aaa is the first 3 characters/digits of the username. (unless you had an account last semester, then it will be whatever you set it to last semester).

**Reminder - these accounts have disk and printer quotas set up. The print quota is 300 pages initially + 200 pages per class.

Please send mail to system@cs.umass.edu if you have any questions or problems.