University at Buffalo
Department of Computer Science & Engineering
201 Bell Hall - (716) 645-3180

Syllabus
Please read this sheet carefully, and save it for future reference.

Instructors

Name	Office	Phone	Email	Web
Adrienne Decker	130 Bell	645-3184	adrienne@buffalo.edu	http://www.cse.buffalo.edu/faculty/adrienne

Course Information

Credit hours: 4

Course Website: http://www.cse.buffalo.edu/faculty/adrienne/FA2010/cse111
> *NOTE:* UBLearns will only be used for the posting of grades. All other course materials will be available only from the website given above.

Lecture Times:

Monday, Wednesday, Friday	12:00 - 12:50	121 Cooke
Monday, Wednesday, Friday	10:00 - 10:50	114 Hochstetter

Lab Times:

A1	W	1:00 - 2:50	Park 143	B1	F	11:00 - 12:50	Baldy 206
A2	W	9:00 - 10:50	Park 143	B3	T	5:00 - 6:50	Park 143
A3	T	8:00 - 9:50	Baldy 206	B4	F	8:00 - 9:50	Park 143
A4	T	11:00 - 12:50	Baldy 206	B5	F	11:00 - 12:50	Park 143
A5	R	11:00 - 12:50	Baldy 206	B6	T	9:00 - 10:50	Park 143
A6	M	1:00 - 2:50	Baldy 206	B7	R	12:00 - 1:50	Park 143
A7	M	1:00 - 2:50	Capen 201				

Course Description

Designed to satisfy the mathematics core requirements. Students study algorithmic problem-solving techniques and gain an appreciation for some of the most interesting and significant results of computer science, as well as its intellectual and social significance. The course has both a mathematical and a laboratory component. Topics may include algorithm design, introduction to programming, structured programming, software tools, software engineering, text manipulation, numerical computation, transistors, very large-scale integrated circuits, machine architecture, language translation, operating systems, and artificial intelligence. **Admitted computer science and computer engineering students should not take this course.**

Schedule of Topics
The following is a tentative list of topics. A more detailed schedule is maintained on the course website and should be checked often for updates. Note that this listing does not imply ordering.

- How did we get here?
    - History of computing
    - Important computing pioneers
    - Important discoveries and inventions

- What's inside the box?
    - Circuits
    - Boolean logic
    - Computer hardware

- How can I get this thing to do what I want?
    - Types of software
    - Software use
    - Software creation
    - Software problems

- The Internet
    - What is it?
    - How does it work?
    - Is too much Internet dangerous?

- Ethical and societal impacts
    - What is my responsibility as a computer user?
    - Societal changes and impacts of computers
    - What can/should a computer do for us?

Course Objectives
At the end of this course, students will have been introduced to several of the great ideas in computer science and should have an appreciation for these ideas. Students should understand the basic architecture of a modern computer, and have basic understanding of the software creation process (including basic algorithm design). Students should understand how the Internet works and be aware of the implications of the use of computers in their everyday lives.

Prerequisites
There are no formal prerequisites for this course. However, it is expected that you have had at least exposure to a computer and can use some basic pieces of software including: web browsers, email clients, word processors. Note that expertise is not required, but familiarity will be helpful. However, in this course, we are not striving to create expert computer software users. If you are interested in detailed instruction on using specific types of software, you need to look for a different course.

Textbooks and Materials
The required textbook for this course is:
- J. Glenn Brookshear. 2009. Computer Science: An Overview, 10th edition, Addison-Wesley. (ISBN: 0-321-52403-9)

Additional reading material may be assigned during the course, and will be announced in lecture.

Computing Resources

You should use any of the University public computing resources for the work in this course. Many of the software programs you will need may also be available to you for use on your own computer. As assignments are announced, computing requirements will be announced along with availability and accessibility. It is your responsibility to know where the resources are available to complete your assignments. Questions about availability and accessibility should be directed to course staff.

All communication regarding this course must be sent from a UB email account. Under no circumstances will e-mail from non-UB accounts be acknowledged or answered. You must include an informative subject line in all e-mail, and include your full name in any e-mail correspondence.

All e-mail that we send in reply to your e-mail will be sent to the address from which you sent your e-mail. Our feedback on materials you hand in electronically will be sent to your UB e-mail account only. Announcements and other messages may also be sent via email using the facilities for sending mass email available in UBLearns. Since you may request re-grades of work only within a set period from the time that the feedback was provided to you, and course announcements could provide you with important information, it is in your best interest to read your UB e-mail account on a daily basis.

Course Organization

The course has both a lecture component and a lab component. Each component plays a role in helping you achieve the objectives of the course. If you do not participate fully in both you should not expect to do well in the course.

Lectures

The conceptual and theoretical course content will be delivered primarily in the lectures, complemented by readings from the text books. You must review readings prior to attending a lecture, and you are expected to review the readings again, along with any notes you took, after the lecture.

You are expected to attend all lectures. If you are unable to attend a lecture because of sickness or similar reasons, make sure you get the notes from a classmate. If you are out of class for an extended period of time because of sickness, notify your instructor as soon as possible, and see your instructor immediately upon your return in order to determine how to catch up. If you have missed a significant portion of the semester due to illness, it is recommended that you resign from the course.

Labs

The labs provide a time for you to work on assignments for the course. In each lab section, the TAs will answer questions about the current assignments. You are free to ask any questions about the assignments and get assistance from the TAs during this time on your personal assignment. It is possible that you will be able to finish your lab work during the lab time. However, it is also possible that you will need to work outside of lab time to finish the assignments. During some lab sessions, there will be assignments to be completed in the lab session. More information about these will be posted on the course website.

Labs do not meet in the first or second week of classes. Labs will begin on the third week of classes.

Course evaluation

The following indicates the grade breakdown which will be used in assigning grades in the course. The right is reserved to make small adjustments to the breakdown if it is necessary.

In-lecture activities (18% of final course grade)
There will be six in-lecture activities scattered throughout the semester. The dates for these activities will be posted on the course website. In-lecture activities will be graded on attendance, participation, and completion. It will be virtually impossible to complete the in-lecture activities without attending the lecture for that day.

Lab attendance (9% of final course grade)
Attendance will be taken at some lab sessions during the semester. Further information will be available on the course website. Attendance credit will be granted for a week's lab if you attend at least one lab during the week the attendance is taken.

Lab assignments and activities (42% of final course grade)
There will be seven lab assignments or activities that you will need to complete throughout the semester. Activities will be assignments that must be completed and handed in during the lab session. Assignments will be started during lab, but do not necessarily need to be finished during the lab session. These assignments could be completed on your own time. Further details about what type of assignment (strictly in-lab or in and out of lab) will be available for each posted assignment. Each assignment and activity will be weighted equally.

Exams (31% of final course grade)
There will be four exams given throughout the course of the semester. Three will be worth 8% of your overall course grade and one will be worth 7% of your overall course grade. Exams will be given in lecture and dates will be posted on the course website.

If you miss an examination or required attendance day or in-class or in-lab activity because of sickness or similar reasons, visit a physician and obtain a note detailing the period during which you were medically incapable of attending the class. Notify your instructor immediately via e-mail or telephone (voice mail) if you are going to miss one of these course activities, before the activity takes place unless medically impossible. See your instructor as soon as you return to class. If you miss an activity, attendance, or exam without a valid excuse, you will receive a zero grade for that course component.

No make-ups will be available without a valid excuse.

During a required attendance, activity, or exam, you may be asked to produce a valid form of picture ID (a UB Card will suffice).

There is no cumulative final exam for this course. There will not be a final exam scheduled during the University's final exam period. Our last day of class will be the last day of lectures for the semester.

Letter grades

The following table indicates the number to letter grade mapping I will use to assign final grades at the end of the course. The Grade points column is included for your convenience only, and is not official information. The official mapping can be found in the Undergraduate Catalog.

Percentage score	Letter grade	Grade points
90-100	A	4.0
85-89	A-	3.67
80-84	B+	3.33
75-79	B	3.0
70-74	B-	2.67
65-69	C+	2.33
60-64	C	2.0
55-59	C-	1.67
50-54	D	1.0
0-49	F	0.0

Re-grading

If you have a question about the grading of any piece of work, first consult with the staff member who graded your work. If it was a teaching assistant who graded your work and you are unable to resolve your questions with that person, you should consult with the instructor of the course.

Any questions about the grading of a piece of work must be raised within one week of the date that the work was returned by the teaching assistant or the instructor. In other words, if you do not pick up your work in a timely fashion, you may forfeit your right to question the grading of your work.

Incomplete (I) grades

We will follow the UB Undergraduate Catalog Statement on Incomplete Grades, found in the Undergraduate Catalog.

Generally, incomplete ("I") grades are not given. However, very rarely, circumstances truly beyond a student's control prevents him or her from completing work in the course. In such cases the instructor can give a grade of "I". The student will be given instructions and a deadline for completing the work, usually no more than 30 days past the end of the semester. University and department policy dictate that "I" grades can be given only if the following conditions are met:

- An Incomplete will only be given for missing a small part of the course.
- An Incomplete will only be given when the student misses work due to circumstances beyond his/her control.

- An Incomplete will only be given when the student is passing the course except for the missed material.
- An Incomplete is to be made up with the original course instructor within the time specified by the appropriate University regulation (see appropriate document above), and usually within the following semester.
- An Incomplete will not be given to allow the student to informally retake the entire course, and have that grade count as the grade of the original course.

Incompletes can not be given as a shelter from poor grades. It is your responsibility to make a timely resignation from the course if you are doing poorly for any reason. The last day to resign the course is **Friday, November 12th**.

General Notes

If you don't understand something covered in class, ask about it right away. The only silly question is the one which is not asked. If you get a poor mark on an assignment, quiz, or exam, find out why right away. Don't wait a month before asking. The instructor and teaching assistants are available to answer your questions. Don't be afraid to ask questions, or to approach the instructor or TA in class, during office hours, or through e-mail.

Disabilities

If you have a diagnosed disability (physical, learning, or psychological) that will make it difficult for you to carry out the course work as outlined, or that requires accommodations such as recruiting note-takers, readers, or extended time on exams or assignments, you must consult with the Office of Disability Services (25 Capen Hall, Tel: 645-2608, TTY: 645-2616, Fax: 645-3116, http://www.student-affairs.buffalo.edu/ods/).

You must advise your instructor during the first two weeks of the course so that we may review possible arrangements for reasonable accommodations.

Counseling Center

Your attention is called to the Counseling Center (645-2720), 120 Richmond Quad. The Counseling Center staff are trained to help you deal with a wide range of issues, including how to study effectively and how to deal with exam-related stress. Services are free and confidential. Their web site is http://www.studentaffairs.buffalo.edu/shs/ccenter/

Distractions in the Classroom - Behavioral Expectations

The following is the text of a policy adopted by the Faculty Senate. You are expected to know and adhere to this policy.

OBSTRUCTION OR DISRUPTION IN THE CLASSROOM - POLICIES UNIVERSITY AT BUFFALO

To prevent and respond to distracting behavior faculty should clarify standards for the conduct of class, either in the syllabus, or by referencing the expectations cited in the Student Conduct Regulations. Classroom "etiquette" expectations should include:

- Attending classes and paying attention. Do not ask an instructor in class to go over material you missed by skipping a class or not concentrating.
- Not coming to class late or leaving early. If you must enter a class late, do so quietly and do not disrupt the class by walking between the class and the instructor. Do not leave class unless it is an absolute necessity.
- Not talking with other classmates while the instructor or another student is speaking.
- If you have a question or a comment, please raise your hand, rather than starting a conversation about it with your neighbor.
- Showing respect and concern for others by not monopolizing class discussion. Allow others time to give their input and ask questions. Do not stray from the topic of class discussion.
- ~~Not eating and drinking during class time.~~
- Turning off the electronics: cell phones, pagers, and beeper watches.
- Avoiding audible and visible signs of restlessness. These are both rude and disruptive to the rest of the class.
- Focusing on class material during class time. Sleeping, talking to others, doing work for another class, reading the newspaper, checking email, and exploring the internet are unacceptable and can be disruptive.
- Not packing bookbags or backpacks to leave until the instructor has dismissed class.

Academic Integrity

The academic degrees and the research findings produced by our Department are worth no more than the integrity of the process by which they are gained. If we do not maintain reliably high standards of ethics and integrity in our work and our relationships, we have nothing of value to offer one another or to offer the larger community outside this Department, whether potential employers or fellow scholars.

For this reason, the principles of Academic Integrity have priority over every other consideration in every aspect of our departmental life, and we will defend these principles vigorously. It is essential that every student be fully aware of these principles, what the procedures are by which possible violations are investigated and adjudicated, and what the punishments for these violations are. Wherever they are suspected, potential violations will be investigated and determinations of fact sought. In short, breaches of Academic Integrity will not be tolerated.

Departmental Statement on Academic Integrity in Coding Assignments and Projects
The following statement further describes the specific application of these general principles to a common context in the CSE Department environment, the production of source code for project and homework assignments. It should be thoroughly understood before undertaking any cooperative activities or using any other sources in such contexts.

All academic work must be your own. Plagiarism, defined as copying or receiving materials from a source or sources and submitting this material as one's own without acknowledging the particular debts to the source (quotations, paraphrases, basic ideas), or otherwise representing the work of another as one's own, is never allowed. Collaboration, usually evidenced by unjustifiable similarity, is never permitted in individual assignments. Any submitted academic work may be subject to screening by software programs designed to detect evidence of plagiarism or collaboration.

It is your responsibility to maintain the security of your computer accounts and your written work. Do not share passwords with anyone, nor write your password down where it may be seen by others. Do not change permissions to allow others to read your course directories and files. Do not walk away from a workstation without logging out. These are your responsibilities. In groups that collaborate inappropriately, it may be impossible to determine who has offered work to others in the group, who has received work, and who may have inadvertently made their work available to the others by failure to maintain adequate personal security. In such cases, all will be held equally liable.

These policies and interpretations may be augmented by individual instructors for their courses. Always check the handouts and web pages of your course and section for additional guidelines.

Departmental and Course Policy on Violations of Academic Integrity
If, after following the procedures required by the University for investigation of suspected breaches of academic integrity, a student is found guilty, the policy of the department of Computer Science & Engineering is that the student minimally receive a grade of F in the course.