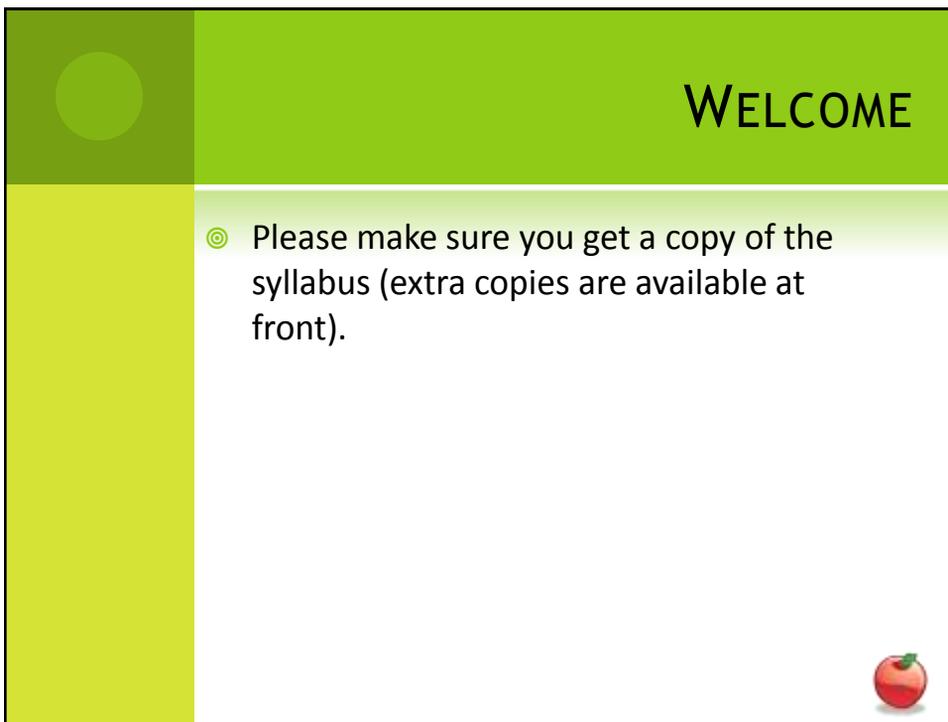


CSE 113 B
January 17-21, 2011

This slide features a light green vertical bar on the left side. The main content area is white, with a dark green horizontal bar at the bottom containing the text 'CSE 113 B' and 'January 17-21, 2011'.



WELCOME

- ⦿ Please make sure you get a copy of the syllabus (extra copies are available at front).



This slide has a dark green vertical bar on the left with a light green circle. The top right has the word 'WELCOME' in white on a dark green background. Below is a white area with a bullet point. A small red apple icon is in the bottom right corner.

CSE 113 - INTRODUCTION TO COMPUTER PROGRAMMING I

⊙ Instructor:

- ⊙ Dr. Adrienne Decker
 - Please call me Adrienne
 - But if you must be formal, it's Dr. Decker or Professor Decker.
 - NOT Miss Decker, or Ms Decker or Mrs. Decker
- ⊙ Office: 130 Bell Hall



CSE 113 - INTRODUCTION TO COMPUTER PROGRAMMING I

⊙ Email: adrienne@buffalo.edu

- ⊙ Email you send me should be from your UBIT email account and should include your full name and which course you are taking.



CSE 113 - INTRODUCTION TO COMPUTER PROGRAMMING I

⊙ Office Hours:

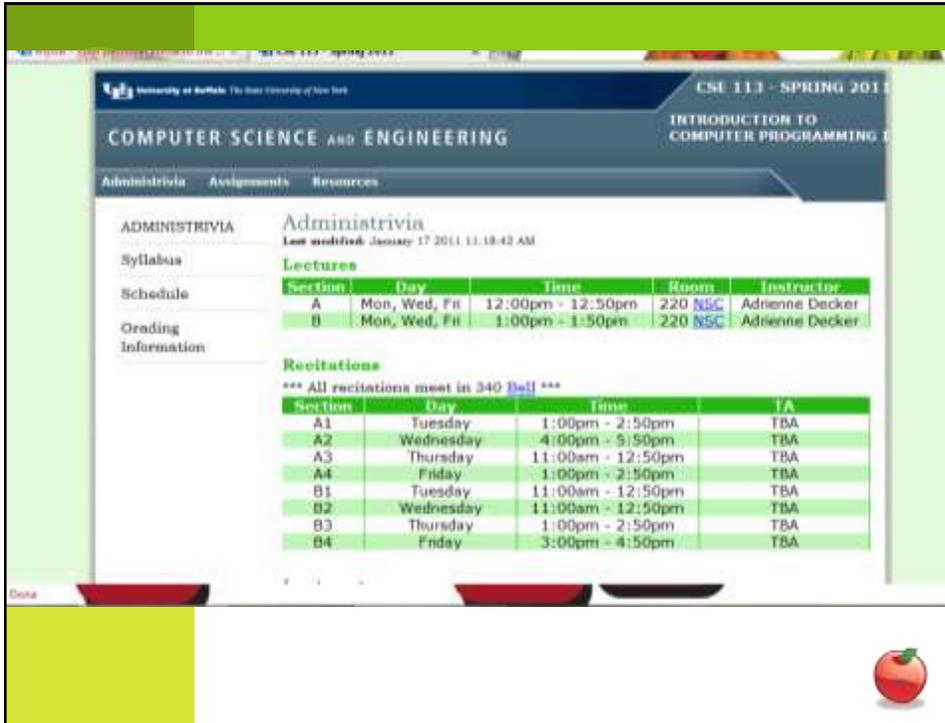
- ⊙ Monday 10:30–11:20
- ⊙ Wednesday 10:00–11:20 and 2:00–2:50
- ⊙ Friday 2:00–2:50



INFORMATION ON THE WEB

- ⊙ All course content will be on the course website:
- ⊙ <http://www.cse.buffalo.edu/faculty/adrienne/SP2011/cse113>
- ⊙ UBLearns will be used to post course grades





University at Buffalo The State University of New York

CSE 113 - SPRING 2011

COMPUTER SCIENCE AND ENGINEERING

INTRODUCTION TO COMPUTER PROGRAMMING I

Administrivia Assignments Resources

ADMINISTRIVIA

Administrivia
Last modified: January 17, 2011 11:18:42 AM

Lectures

Section	Day	Time	Room	Instructor
A	Mon, Wed, Fri	12:00pm - 12:50pm	220 NSC	Adrienne Decker
B	Mon, Wed, Fri	1:00pm - 1:50pm	220 NSC	Adrienne Decker

Recitations

*** All recitations meet in 340 Bell ***

Section	Day	Time	TA
A1	Tuesday	1:00pm - 2:50pm	TBA
A2	Wednesday	4:00pm - 5:50pm	TBA
A3	Thursday	11:00am - 12:50pm	TBA
A4	Friday	1:00pm - 2:50pm	TBA
B1	Tuesday	11:00am - 12:50pm	TBA
B2	Wednesday	11:00am - 12:50pm	TBA
B3	Thursday	1:00pm - 2:50pm	TBA
B4	Friday	3:00pm - 4:50pm	TBA



COURSE STRUCTURE

- ⊙ Lecture (3 hours each week)
- ⊙ Recitation (2 hours each week)
 - ⊙ You should be registered for a recitation section and a lecture.
 - ⊙ **Recitations do not meet this week.**
- ⊙ If you are interested in changing your recitation section and are unable to do so through the registration system, please fill out Recitation Change Request Form.



COURSE DESCRIPTION AND PREREQUISITES

- ⦿ This course is an introduction to computer programming for non-majors. Intended computer science or computer engineering students should not take this course.
- ⦿ There are no prerequisites for this course, but you should have some familiarity with a computer (that is, you should have used one before).



TEXTBOOK

- ⦿ Michael Kölling – Introduction to Programming with Greenfoot: Object-oriented Programming in Java with Games and Simulations
- ⦿ The package (paper book and eBook) is available at the University Bookstore, Greeks and Sneaks.
- ⦿ The paper book is available through many outlets.



COMPUTING RESOURCES

- ⦿ Projects for this course will be completed on the School of Engineering's computer systems.
- ⦿ You will be receiving an account on these systems.



COURSE GRADES

- ⦿ 45% - Exams
 - ⦿ Four in-class exams – lowest grade dropped. Dates posted already on the course website.
- ⦿ 35% - Programming Exams (3)
 - ⦿ Two take place in recitation during the semester, one during final exam week. Dates listed in syllabus and on course website.



COURSE GRADES

- ⦿ 20% - Programming Assignments
 - ⦿ Ten assignments each worth 1.5% of your grade. One to ten practice assignments worth a total of 5% of your course grade.



COURSE GRADES

- ⦿ Important Note:
 - ⦿ If you do not attempt the third practical exam (or are not allowed to take the third practical), the highest grade you can earn in the course is an F.
 - ⦿ You will not be allowed to take the third practical exam if your grade on ANY of the ten programming assignments is below 50%.



LETTER GRADES

- ⦿ See chart in syllabus.
- ⦿ There is no curve on the course grades. If your average falls in between the cutoffs, that is your grade.



COURSE POLICIES

- ⦿ Re-grading – any questions about graded work must be raised within one week of the return of the work.
- ⦿ Incompletes – we will follow the university's policy on incompletes – unless you meet the criterion, you will not get an incomplete.



COURSE POLICIES

- ⦿ Disability Services – If you are registered, please bring me the letter indicating your accommodations.
- ⦿ Athletics – If you are an athlete, please come to speak with me about how that will effect this course this semester.



COURSE POLICIES

- ⦿ Disruption/Behavior in the Classroom
 - ⦿ Take note of the University's policy on this issue (in syllabus)
 - ⦿ Be respectful of each other



COURSE POLICIES

⦿ Academic Integrity

- ⦿ Breaches of academic integrity will be investigated and punishments imposed in accordance with the University's policies AND my department's policies.
- ⦿ My department's policy is that ANY breach of academic integrity is punished with an F in the course (no more lenient punishments allowed).



SYLLABUS CONFIRMATION

- ⦿ You need to go to UBLearns and complete the syllabus confirmation "test" that is now available in the course.
- ⦿ Failure to complete this "test" will render you ineligible to take the third practical exam.
- ⦿ You have until the end of the day, Monday, January 31, 2011 to complete the "test".



FAQ

☉ Where are the slides posted?



ANSWER

Course notes (slides) are posted here at the END of each week...

Administrivia

ADMINISTRIVIA

Syllabus

Schedule

Grading

Information

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B3	Thursday	1:00pm - 2:50pm	TBA
B4	Friday	3:00pm - 4:50pm	TBA

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CSE 113

ANNOUNCEMENTS

- ⊙ Pick up (and READ) syllabus if you have not already done so.
- ⊙ No recitations meet this week.
- ⊙ Recitation change form (if you are interested in changing your recitation day/time).
- ⊙ Syllabus Confirmation “test” on UBLearn needs to be completed by 1/31/11.



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WHAT IS PROGRAMMING
LIKE?

- ⊙ Structured
- ⊙ Specific
- ⊙ Detail-oriented
- ⊙ Organized
- ⊙ Well-thought out
 - ⊙ Considers many possibilities



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WHAT IS PROGRAMMING LIKE?

- ⦿ It's creative
- ⦿ It's fun
- ⦿ It's an art... you need to practice to get good at it



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WHY?

- ⦿ Programming has all of those characteristics (and more) mainly because of the underlying structure of the computer itself.



WHAT DOES A COMPUTER UNDERSTAND?

- ⦿ 0's and 1's (zeros and ones)



BITS AND BIT STRINGS

- ⦿ The 0 or 1 is called a binary digit (bit).
- ⦿ A sequence of bits is called a bit string.
- ⦿ 8 bits together is called a byte
 - ⦿ 1024 bytes = 1 kilobyte (KB)
 - ⦿ 1024 kilobytes = 1 megabyte (MB)
 - ⦿ 1024 megabytes = 1 gigabyte (GB)
 - ⦿ 1024 gigabytes = 1 terabyte (TB)



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WHAT DO THEY MEAN?

- ⊙ 0100101 is a bit string
 - ⊙ What does it mean/represent?



INTERPRETING BIT PATTERNS

- ⊙ Letters
- ⊙ Numbers
 - ⊙ Integers (whole numbers)
 - ⊙ Floating point (decimal numbers)
 - ⊙ Why are there two types of numbers?



ENCODING MACHINE INSTRUCTIONS

- ⊙ Use bits to encode those as well
- ⊙ When we want the machine to follow those instructions:
 - ⊙ Fetch
 - ⊙ Decode
 - ⊙ Execute



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PROGRAMMING LANGUAGE

- ⊙ Language we can use to write computer programs
- ⊙ Similar to and different from natural language.



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SIMILARITIES TO NATURAL LANGUAGE

- ⊙ Syntax - *Grammar*
- ⊙ Semantics - *Meaning*
- ⊙ Written down
- ⊙ Read



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DIFFERENCES FROM NATURAL LANGUAGE

- ⊙ Rarely spoken



TOOLS

- ⊙ Editor - *Place to type the program*
- ⊙ Compiler - *Translator*
- ⊙ Execution Environment

