

Welcome to CS1007!

Introduction to Computer Science in Java

Spring 2002

Section 001: TR 2.40pm - 3.55pm 301 Pupin
Section 002: TR 11.00am - 12.15pm 209 Havemeyer

Professor Elizabeth Sklar

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Class web page:
<http://www.columbia.edu/~cs1007>

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course objectives.

- learn your first (?) programming language
- become fluent in Java
- understand abstract computer architecture
- develop good programming habits
 - structuring code
 - commenting code
 - debugging
- gain skills that can transfer to other programming languages, like C or C++

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resources.

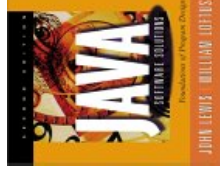
- lectures
- textbook
 - Lewis & Loftus: Java Software Solutions
- lecture notes
- recitations
- web page
 - <http://www.columbia.edu/~cs1007>
- TAs
- me
 - BUT DON'T E-MAIL ME CODE!!

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textbook.

Java Software Solutions: Foundations of Program Design.
by Lewis and Loftus
Addison Wesley, JavaPlace edition, 2001
ISBN 0-201-75052-X



available at Labyrinth Books
(112th, between Broadway & Amsterdam)

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assessment.

- out of 100 points
- 6 homework assignments (40 points total)
 - homework #1 (5 points) – due Thu Jan 31
 - homework #2 (7 points) – due Thu Feb 14
 - homework #3 (7 points) – due Thu Mar 7
 - homework #4 (7 points) – due Thu Mar 28
 - homework #5 (7 points) – due Thu Apr 11
 - homework #6 (7 points) – due Thu Apr 25
- 3 exams (60 points total)
 - midterm I (15 points) – Thu Feb 21
 - midterm II (20 points) – Thu Apr 4
 - final exam (25 points) – TBA (during exam period)
- *note that all dates are tentative and subject to change!*

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a word about homeworks.

- should be done on your own, as much as possible
- get help from TAs, me, friends
but you must acknowledge all help received by citing the names of those who helped you in the comments of your program (I'll explain what comments are before you need to do this)
- this not only protects you from being accused of cheating, but also protects you in case your helper gives you misinformation
- this also lets me know who is really helpful, which is useful in selecting TAs for next semester

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homeworks: submission policy.

- homeworks are due on the day that they are due
- here are the rules — please know them well:
 1. all homeworks **MUST** be submitted electronically by Thursday at 6AM
 2. you **MUST** submit **BOTH** an electronic and a hardcopy of all assignments
 3. electronic submissions:
 - only electronic assignments are graded
 - hardcopies are a convenience for the TA and are used to return comments to you
 - without an electronic copy, you will not receive a grade for the assignment
 - submission time is clocked according to the time of your electronic submission
 - be aware that the system tends to get clogged when too many people try to submit at the same time — so **AVOID A LATE PENALTY** and don't submit too close to the 6AM deadline!
 - you may have a total of 50 hours grace time for lateness of electronic copies, which may be used up all at once or split between several assignments
 4. hardcopies:

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- hardcopies must be brought to class on Thursday and deposited in the homework box in the front of the classroom within the first 5 minutes of class
- a TA will come to class and collect the box at 11.05am (morning class) and at 2.45pm (afternoon class)
- if your hardcopy does not make it into the box, you will lose 1 point and the TAs will print the hardcopy
- if you attempt to bribe the TA, you will receive 0 for that assignment
- if you must miss class, have a friend deposit your hardcopy
- late hardcopies will not be accepted — **PERIOD**.
- exceptions and extensions are possible, primarily based on **MEDICAL EMERGENCIES**
 - circumstances must be documented and suitable arrangements will be made — you must consult me via email on an individual basis

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homeworks: regrade policy.

- if you feel that there was an error in grading your homework or exam, then you need to write on a piece of paper a description of the error
- STAPLE the paper to your homework or exam and leave it with me to be regraded
- know that the TAs are given a list of expectations for each homework assignment and exam problem and told where to take off points — so if your complaint is that too many points were taken off for one kind of mistake or another in your program, then generally those types of things will not change in a regrade
- if there is a genuine error in the marking, like we thought something was missing, but it is really there, then you will likely get points restored
- HOWEVER, a regrade means that the entire assignment or exam will be remarked, so be aware that your mark can go DOWN as well as UP
- regrades take while to process, so be patient — if you need the work to study from, then make a copy of it before you turn it in for a regrade

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homeworks: a word to the wise.

- save early and save often!
- disk drives crash
- floppies have bad sectors
- power supplies fail
- monitors die
- mice get trapped
- paper print-outs are the best security known to mankind

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a word about lectures.

- brief lecture notes will be placed on the web page after every lecture
- but they are NOT A SUBSTITUTE FOR COMING TO CLASS
- I know, I used to skip classes too
- If you must miss a class, YOU are responsible for getting notes from someone who did come to class
- I do not post lecture notes on the web before class because:
 - you learn better when you actually have to write things down yourself
 - reading along with my notes makes you sleepy
 - everything I say is NOT in the lecture notes, but anything I say MIGHT be on an exam or in a homework, so you need to take notes on what I say
 - sometimes there are mistakes in the lecture notes which get caught during class; so the correct version gets posted
- I try to will post any code that I will cover before class

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a word about exams.

- are the only way I know you are doing your own work
- are the only way YOU know you are doing your own work
- are not hard if you really know the material
- notice my weighting scheme for exams
 1. midterm I: 15%
 2. midterm II: 20%
 3. final exam: 25%
- I give three exams with increased weight, so you can learn how to take an exam in computer science
- think of the first exam as a practice exam

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a word about feedback.

- homeworks and exams let me know how you are doing
- and in a way, they let me know how I am doing, as a reflection of how you are doing
- but, I welcome feedback from you
- email, anonymous written notes, etc.

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a word about academic integrity.



- the work you submit for assessment should be completed ON YOUR OWN
- you may get help from TAs, me, friends
- you must acknowledge all help given
- you should not mail code or copy files
- if someone asks you to do this, *JUST SAY NO!*

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topics covered.

- compiling, linking and running programs
- basic Java language elements
- debugging techniques
- program organization
- writing your own Java classes
- graphics
- animation, simulation
- applets, web pages and interfaces

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how to learn a programming language.

- YOU are responsible for your own learning!!!
- I will point you in the right direction...
- but YOU must PRACTICE, PRACTICE, PRACTICE...
- and PRACTICE some more!!!
- if you don't understand, then ASK for help!

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which environment?

- there are lots of Java compilers and programming environments
- in class, we'll use the CUNIX system and EJAVAs (the Emacs editor and the Java environment)
- this is a text-based environment, which may be boring, but it's free and it's easier to understand because it doesn't try to do everything
- but the main reason to use the CUNIX environment is that this course is geared toward CS majors, and you will need to be comfortable in a UNIX environment for all other classes in the CS department — so learn it now and don't wait until Data Structures when things get really hard

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getting started.

- programming is like solving puzzles
- think differently
- the world is now made up of *objects* and *actions*

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to do soon.

- please sign up for a recitation
- get a CUNIX account (if you don't already have one)
- please get a copy of the textbook!
- please attend one of the ACS training sessions: "Introduction to UNIX for Java Programming"

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recitations.

- sign up for a recitation (sign up sheet in class)

day	date	time	room
recitation #1	Mon	7.00pm – 8.00pm	252 ET
recitation #2	Mon	8.00pm – 9.00pm	252 ET
recitation #3	Tue	6.00pm – 7.00pm	407 Math
recitation #4	Tue	7.00pm – 8.00pm	407 Math
recitation #5	Tue	8.00pm – 9.00pm	407 Math
recitation #6	Wed	6.00pm – 7.00pm	252 ET
recitation #7	Wed	7.00pm – 8.00pm	252 ET
recitation #8	Wed	8.00pm – 9.00pm	252 ET

- ET = Engineering Terrace
- starting next week (week of Jan 28)
- this is where you will get back your homeworks

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AclS training sessions.

day	date	time	room
Fri	Jan 25	2.30pm – 4.30pm	252 ET
Fri	Jan 25	12.30pm – 2.30pm	252 ET
Mon	Jan 28	4.00pm – 6.00pm	252 ET
Tue	Jan 29	4.00pm – 6.00pm	252 ET
Fri	Feb 1	2.30pm – 4.30pm	252 ET
Fri	Feb 1	10.00am – 12.00pm	252 ET
Mon	Feb 4	4.00pm – 6.00pm	252 ET
Mon	Feb 4	12.00pm – 2.00pm	252 ET
Wed	Feb 6	4.30pm – 6.30pm	252 ET
Fri	Feb 8	2.30pm – 4.30pm	252 ET
Fri	Feb 8	12.30pm – 2.30pm	252 ET

- ET = Engineering Terrace

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about me.

- undergrad: Barnard, CS major, class of 1985
- 10 years of industry experience working as a scientific and business programmer
- grad school: Brandeis University, PhD 2000
- previous teaching:
 - Monash University, Melbourne, Australia
 - University of Melbourne, Melbourne, Australia
 - Boston College, Massachusetts
- research interests:
 - educational robotics — RoboCup
 - Internet communities
 - software agents

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about you.

- please take out a piece of paper and write down...
 1. your name
 2. your class and major OR if you are a non-matriculating student, categorize yourself
 3. your background in computers, if any
 4. why you are taking this course
 5. what you hope to get out of this course
 6. one sentence about one wonderful thing you did over the break
- ...and give it to me before you leave

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