

COMP 285 OBJECT-ORIENTED PROGRAMMING

1. INSTRUCTOR: JOEY LAWRENCE, PH.D.

Office: Dobbs 105
Office hours: Tuesday 12:30pm-1:30pm
Friday 12:30pm-2:30pm
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2. COURSE OVERVIEW

This course is an introduction to object oriented programming and design. Topics include: abstraction and encapsulation, classes and objects, inheritance, generics, dynamic allocation, polymorphism, stacks, linked lists, recursion, and design patterns.

Recitation/Lab/Credit: 3/2/4

Dates: September 6-December 9, 2011

Recitation: Rubenstein 201. Tuesday, Thursday 2pm-3:15pm

Lab: Beatty 303. Friday 3pm-4:50pm

Required text: Horstmann, Cay S., *Big Java: 4th Edition*, John Wiley & Sons, 2009.

Prerequisite: COMP201 (Computer Science II)

2.1. **Topics.** The topic schedule suggests course pacing. **Holidays are in bold.**

Week		Topics	Read Chapter(s):
September 6	1	Introduction to Java	1.4-1.6
September 13	2	Using Objects	2
September 20	3	Implementing Classes	3
September 27	4	Basics in Java	4-6
October 4	5	Arrays in Java	7
October 11	6	Designing classes	8
October 18	7	Interfaces and Polymorphism	9
October 25	8	Midterm grades available, Inheritance	10
November 1	9	Input / Output and Exception Handling	11
November 8	10	Recursion, Veteran's Day	13
November 15	11	Sorting and Searching	14
November 22	12	Introduction to Data structures, Thanksgiving	15
November 29	13	Generic Programming	17
December 6	14	Design Patterns	
	15	Final Presentation	

2.2. Course learning outcomes.

- Write code using abstractions and encapsulation.
- Develop classes suited to task.
- Use generics on containers.
- Use polymorphism to enable modularity.
- Demonstrate uses for a stack, linked list.
- Write recursive methods.
- Apply design patterns to code.
- Evaluate source code with evidence and criteria.

2.3. **Instructional Methodologies.** *Teaching* means engaging *learning* through practice or correcting mistakes. Class time will be devoted to practice and critique.

3. POLICIES

3.1. **Attendance Policy.** I expect regular, punctual attendance to every meeting. With documentation, I will excuse absences from athletics, conferences, funerals, illness, and jury duty.

- After 3 unexcused absences, you will receive an attendance warning.
- After 6 unexcused absences, you will be withdrawn from the course.
- <http://www.wit.edu/catalog/2011-Catalog/academic-policies/Attendance.html>

3.2. **Grading Policy.** The following are out of a total of 2600 points total.

Activity	Count	Points each	Total Points
Programming assignment	11	100	1100
Participation	40	15	600
Recitation	1	200	200
Project (milestones)	7	100	700

3.3. Wentworth Grading System.

Letter	Definition	Weight	Grade
A	Student learning and accomplishment far exceeds published objectives and student work is distinguished consistently by its high level of competency and/or innovation.	4.00	96-100
A-	Student learning and accomplishment goes beyond published objectives and student work is frequently characterized by its special depth of understanding, development, or innovative experimentation.	3.67	92-95
B+	Student learning and accomplishment meets all published objectives and student work demonstrates the expected level of understanding, and application of concepts introduced.	3.33	88-91
B	Student learning and accomplishment based on the published objectives were met with minimum passing achievement.	3.00	84-87
B-	Student learning and accomplishment based on the published objectives were not sufficiently addressed nor met.	2.67	80-83
C+		2.33	76-79
C		2.00	72-75
C-		1.67	68-71
D+		1.33	64-67
D		1.00	60-63
F		0.00	< 60

3.4. **Drop/Add.** The drop/add period for day students ends on Friday of the first week of classes. Dropping and/or adding courses is done online. Courses dropped in this period are removed from the student's record. Courses to be added that require written permission, e.g. closed courses, must be done using an Add/Drop Form that is available in the Student Service Center.

Non-attendance does not constitute dropping a course. If a student has registered for a course and subsequently withdraws or receives a failing grade in its prerequisite, **then the student must drop that course**. In some cases, the student will be dropped from that course by the Registrar. However, it is the student's responsibility to make sure that he or she meets the course prerequisites and to drop a course if the student has not successfully completed the prerequisite. The student must see his or her academic advisor or academic department head for schedule revision and to discuss the impact of the failed or withdrawn course on the student's degree status.

3.5. Make-up policy. Students who are legitimately absent, whether planned or not, can make up for materials missed. Notify the instructor well in advance of planned absences. Provide supporting documentation for unplanned absences. Minutes are available at: <http://bit.ly/COMP285Minutes>

3.6. Academic Support. The Learning Center assists all Wentworth students with academic challenges in the areas of math, science, technical courses specific to majors, and writing. The Learning Center is a supportive and safe learning environment for students looking to improve or maintain their academic standing. In this student-based learning environment, students can receive individual help with their studies, meet and work in study groups, or go on-line to find resources to assist them in meeting their goals for academic success. It includes tutors in many subjects, online writing assistance and workshops.

Make appointments at <http://www.wit.edu/Academics/Resource/>. They are located in Beatty 402, and offer FREE tutoring. Please make an appointment if you need extra help.

3.7. Academic Honesty statement. Students at Wentworth are expected to be honest and forthright in their academic endeavors. Academic dishonesty includes cheating, inventing false information or citations, plagiarism, tampering with computers, destroying other people's studio property, or academic misconduct. See the academic catalog for a full explanation.

3.8. Student Accountability statement. Cheating and plagiarism will result in a grade of zero for violators and accomplices. The second violation will result in an "F" for the course for violators and accomplices. Removal from the course, Institute suspension or expulsion are also potential penalties for violations.

3.9. Disability Services statement. Any student who thinks s/he may require a disability-related accommodation for this course should contact me privately to discuss your specific needs. Disability Services coordinates reasonable accommodations for students with documented disabilities. They are located in Watson Hall 003 (the Counseling Center) and can be contacted at 617-989-4390 or <mailto:counseling@wit.edu>. For more information on acceptable documentation and the Disability Services process, visit the Disability Services website at <http://www.wit.edu/disabilityservices>.

3.10. College of the Fenway Students. If you are enrolled in this course through COF Cross Registration, notify your course instructor. Please provide her/him with your email address to be sure that you receive course information in a timely way. You should also discuss how to access online applications that might be used in the course. Please note that cross registered students who wish to drop or withdraw from this course must complete the necessary paperwork according to the Wentworth calendar.