

CSCI 151-01: Foundations of computer science II

Syllabus

1. Basics

Instructor:	Derek Leonard (leonardd@hendrix.edu)
Class Hours:	MWF 2:10-3:00pm in MCREY 317 R 2:40-3:30pm in MCREY 317
Office Hours:	WF 1:00-2:00pm, 3:00-4:00pm in MCREY 320 TR 3:00-5:00pm
Office Phone:	501-505-2933
Book:	Peter van der Linden, <i>Just Java 2</i> , Sun Microsystems Press, 6 th edition, 2004 (not required, but suggested)
Website:	http://ozark.hendrix.edu/~leonard/151-01/

2. Learning Goals

- Describe when the List, Map, Set, PriorityQueue, Stack, and Queue ADTs are useful.
- Describe and implement good data structures for each of these ADTs, including array, list, tree, and hash table implementations when appropriate.
- Analyze algorithm efficiency using Big-O notation.
- Analyze program correctness using preconditions, postconditions, and invariants.
- Be proficient with combining a large number of classes into a single program.

3. Class Description

This course is a continuation of programming skills introduced in CSCI 150. There is also an introduction to mathematical analysis of algorithms and data structures.

Exams and Quizzes: There will be 4 quizzes, 2 exams, and a final. This may change as the semester progresses.

Final Grade: A: 90-100%, B: 80-90%, C: 70-79%, D: 60-69%, F: 0-59%. If warranted this scale will be adjusted at the end of the semester.

Distribution of points:

Assignment	Quantity	Format	Percent of final grade
Homework	10	Code	35%
Project	1	Code/Progress/Presentation	15%
Quiz	4	Partial class period	12%
Exam	2	Entire class period	16%
Final	1	Final exam period	17%
Participation/attendance		See below	5%

Homework: Due at the beginning of class; late homework is accepted with a penalty of 20% per day (no points after 5 days). The quantity of homework is subject to change.

4. Participation/Attendance

Participation in class is highly desired. I will allocate the 5% by generally assigning 2% for attendance (1 unexcused absence or less to achieve full credit) and 3% for actively joining in class discussions and asking questions (subjective).

University excused absences (see handbook) will be honored. Any other absence must be approved at least 24 hours before class.

5. Assignments

Unless specified, you may work with one other student on coding assignments, turning in a single solution with both names on it.

If two identical or nearly-identical solutions are submitted, it will be considered a violation of academic integrity (see below).

6. Office Hours

The office hours listed above are meant to be time that I am guaranteed to be in my office for meeting with students about the class. However, please feel free to stop by any time my door is open. I will often answer emails late into the night, so that is another way to ask a question or voice a concern.

7. Classroom Environment

The classroom should be free of distractions in order to maximize the relatively short class period. It is disrespectful to me and other students if you are engaging in an activity other than participating in class. Here are some guidelines:

- Class will start and end on time. Please do not come in late or leave early.
- Cell-phones should not be used during class (this includes text messaging).
- Laptops should be restricted to classroom activities only.

8. Academic Integrity

You may not copy or submit **any** part of other students' work, material found in books or publications, or text from the Internet unless explicitly allowed by the instructor. Code provided by the instructor can be copied at will.

If permission is granted, the copied parts must be clearly marked and properly cited (this includes code). If you are unsure, check with the instructor prior to submitting assignments.

Please review the section on **Academic Integrity** in the Hendrix Catalog. **Any act of academic dishonesty, whether cheating or plagiarism, will most likely result in an F for the course and may lead to the instructor pursuing suspension or expulsion from the college.**

9. Disabilities

It is the policy of Hendrix College to accommodate students with disabilities, pursuant to federal and state law. Any student who needs accommodation in relation to a recognized disability should inform professors at the beginning of the semester. In order to receive accommodations, students with disabilities are required to contact Julie Brown in Academic Support Services at 505-2954.