### COSC 311 Algorithms & Data Structures

**WINTER 2017** 

COSC 311-0, CRN: 27127

T Th 11:00 - 12:15pm 203 PH

Instructor: Professor Haynes, shaynes@emich.edu

511 E Pray Harrold

Office hours: See http://emunix.emich.edu/~haynes

Course Homepage: http://emunix.emich.edu/~haynes/311/wi17/

**Textbook information:** Goodrich, Tammasia, Goldwasser; *Data Structures &* 

Algorithms in Java, 6th edition

Any format is fine. eText format can be rented from amazon.com for \$36.45

**Catalog description**: Linear lists, strings, arrays, and orthogonal lists. Representation of trees and graphs. Storage systems, structures, storage allocation and collection. Symbol tables, searching and sorting techniques. Formal specification of data structures and data management systems. 3 ch

Prerequisite: COSC 211 Corequisite: COSC 221.

Language of implementation: Java.

**Development environment:** You can develop in any environment you choose. HOWEVER, demos must be given in NetBeans, Eclipse or console. Your demos must run on a departmental machine.

#### **Tutoring:**

The tutors in 513 PH can help. OBVIOUSLY do NOT allow them to write code for you. They will not be particularly helpful in figuring out the assignment. However, once you tell them what your program is supposed to do, they can help point out errors in logic and syntax.

## **Important Dates**

Date	Item
1/5	First day of class
2/21	No class (winter recess)
2/23	No class (winter recess)
4/18	Last day of class
4/20	Final exam, 11:00 – 12:30pm

**Student Work**: This is the most important class in the undergraduate computer science major or minor. You MUST be able to program in Java in order to pass this class.

65% Programs (total program score must be above 32.5/50 (65%) to

receive a passing score in the class)

20% Two hourly exams (non cumulative)

15% Final Exam (cumulative)

# **Assignment of grades:**

91 -100% A range 81 -90% B range 71 -80% C range 61 -70% D range

If you score below 65% on the programming portion, the highest possible grade is D-.

#### Old tests:

Some tests given in earlier semesters are available at

http://emunix.emich.edu/~haynes/courseArchive.html

### **Academic Honesty:**

I expect, and your fellow students expect, that every person in this class will adhere to the highest ethical standards. All work handed in to me must be your own independent work unless otherwise specified. If you act in an academically or ethically dishonest manner, you should expect an E for the final your name to be submitted to the dean of students for dismissal or academic sanction from this university.

**Caveat**: This syllabus will be changed as I deem pedagogically necessary or preferable. I will publish written changes to the syllabus. Such a change may require a change in grading rubric.