

**COSC 311 Algorithms & Data Structures**  
*COSC-311-0, CRN: 21006*

**WINTER 2016**

**T Th 10:00 – 11:15 am**

**203 Pray Harrold**

**Instructor:** S Haynes, shaynes@emich.edu  
511 E Pray Harrold  
Office hours: See <http://emunix.emich.edu/~haynes>

**Course Homepage:** <http://emunix.emich.edu/~haynes/311/wi16/>  
Course materials, including links, lecture notes, assignments, will be posted to the course website.

Any change of policy will be posted to the course website.

**Textbook information:** Koffman & Wolfgang, *Data Structures: Abstraction and Design Using Java* 2nd Ed, Wiley, ISBN-10: 0470128704.

**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.

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*Prerequisites:* COSC 211 and COSC 211.

**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.

**All projects must include UML diagram and javadoc documentation.**

<http://yed.yworks.com/support/manual/uml.html> is one of many possible tools for UML.

**Tutoring:** The tutors in 513 PH can help. Do NOT allow them to write code for you.

**Important Dates**

Date	Item
1/7	First day of class
2/23, 25	Winter break
4/19	Last day of class
4/21	Final: 9:30 – 11:00 am

**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.

1. 50% Projects
2. 20% Two hourly exams (non cumulative)
3. 15% Final Exam (cumulative)
4. 15% Homework/Quizzes/etc.

**Assignment of grades:**

1. 91 - 100% A range
2. 81 - 90% B range
3. 71 - 80% C range
4. 61 - 70% D range
5. If you score below 65% on the programming portion, the highest grade you can receive is a 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 will receive an E for the final grade and I will submit your name to the dean of students for dismissal or academic sanction from this university