

# Mathematics 3870: Data Structures Fall 2011

## Time and Place

11:00–12:00 MWF

Old Main 2230

## Instructor

Dr. Bill Slough

Old Main 3212

581–7529

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Office hours: 10:00 – 11:00 MW, 9:00 – 11:00 F; other times by appointment.

## Textbook

Koffman and Wolfgang, *Objects, Abstraction, Data Structures and Design Using Java*, Wiley, 2005.

## Overview

The purpose of this course is to study the design and analysis of data structures and their related algorithms — lists, stacks, queues, trees, heaps and graphs; sorting and searching. Java will be used as the implementation language although class discussions will use a language-independent format when appropriate.

## Required Background

You are expected to be familiar with with Java, NetBeans and related environments at a level obtained by completing MAT 2670 or its equivalent. You should also be comfortable with various topics from discrete mathematics, since these are needed for the analysis of algorithms.

## Evaluation

Your grade for the course will be determined from the following components, using the relative weights shown. Exam dates are tentative, but will not be sooner than shown below.

Exam 1	Friday, October 7	20%
Exam 2	Friday, November 18	20%
Homework Exercises		30%
Final	Wednesday, December 14, 10:15–12:15	30%

The following scale will be used as a first approximation to your grade:

90–100: A      80–89: B      70–79: C      55–69: D      0–54: F

In borderline cases, factors such as overall trends and the final exam score will be taken into consideration. It is possible that the cut-off scores given above will be lowered. As a result, an overall score of 80 is guaranteed to receive at least a B, whereas a score of 78 might result in a B.

## Miscellaneous

- By pointing your web browser to

<http://www.eiu.edu/~mathcs/mat3870/>

you can find late-breaking news of interest related to this course, download class handouts, obtain descriptions of exercises, and find links to related files. This web site will evolve over time; check back frequently to stay informed.

- If you have a legitimate reason which prevents you from taking an exam at the regularly scheduled time, be sure to notify me before the exam is given. If you cannot reach me, call the department office (581-2028) and leave a message for me.
- Attendance and participation will contribute to your success in this class. Points will not be deducted for absences; however, you are responsible for any material you might miss.
- Due dates are important and will be strictly observed.
- Silence your phones during class.
- If you have a documented disability and wish to receive academic accommodations, please contact the Coordinator of the Office of Disability Services (581-6583) as soon as possible.

## Academic Integrity

All work you turn should be your own. Although you are encouraged to talk to classmates about concepts and ideas, academic dishonesty comes into play when a solution is simply copied from another student, web site, etc. The Office of Student Standards (formerly, Judicial Affairs Office) will be used to deal with instances of academic dishonesty.