Meeting Times and Location:
Section 1: MF 8-8:50AM Lab (Caputo 130) OR Roddy Hall Rm 147
     TH 8-9:50AM Roddy Hall, Rm 147
Section 2: MF 10-10:50AM Lab (Caputo 130) OR Roddy Hall Rm 147
     W 10-11:50AM Roddy Hall, Rm 147

Office Hours: My office hours are Monday/Friday 9am-10am, Wednesday noon-1pm
and Thursday 10am-noon. During office hours I can be found either in the lab or in
my office (Rm 133, Roddy Hall).

How to reach me: The best way to reach me outside of office hours is by email
(stephanie.schwartz@millersville.edu). If you don’t have access to email, my office
phone number is 872-3470. I try to check this as frequently as possible, but I don’t
check it as often as I do my email!

Catalog Description:
This course is a continuation of CSCI 161 that covers advanced computer
programming techniques. Emphasis is placed on object-oriented programming;
specification and design of elementary data structures; and proper use of
programming language and development tools. Topics include abstract data types,
classes, objects, recursion, linked lists, queues, stacks, and binary trees.

This course includes a laboratory component, and is currently taught using Java.

Prerequisite: C or better in CSCI 161.

Required Text: Data Structures and Other Objects Using Java, Fourth Edition, by
Michael Main. ISBN 0132576244

Course Outcomes: At the end of this course, a successful student will be able to

1. design, implement, and test programs of several hundred lines;
2. use typical programming techniques including multidimensional arrays,
recursion, pointers, dynamic memory allocation, templates, exception
handling, file I/O, stacks, queues, and linked lists;
3. implement abstract data types; and
4. describe the concepts of intellectual property, copyrights, patents and trade
secrets, as well as their application in computing.

Grading:
Exam 1: 25%
Exam 2: 25%
Final Exam: 25%
Homework and Programming Assignments: 25%
Grading will be on a 100 point scale, with 93%=A, 90%=A-, 87%=B+, 83%=B, etc.

**Graded Work:**

- **Labs:** We will use the Linux Lab (STB 130), which has 27 PCs which run the Linux operating system. See Linux Lab for more details. Approximately ten lab sessions will be held for hands-on practice.

- **Programs/Homework:** Approximately twelve programs/homeworks will be given. Assignments should be submitted using the `submit` script unless specified otherwise. Code should be formatted according to the coding standard discussed in class. It is imperative that your code is neatly formatted (proper indentation) and well-documented (comments, identifiers); correct, but sloppy, programs will not be accepted. Note well the format of programs distributed in class. Eclipse will help ensure your code is properly formatted.

There are no late programs. If your assignment is incomplete, submit it for possible partial credit to my schwartz162 account. Programs must compile and run for any credit. Developing your programs incrementally can provide assurance that you will receive some credit for your work. Remember – some points are better than no points!

- **Exams:** Three examinations, including a final, will be given. They will cover material from the lectures and labs. Makeup exams will not be given -- if you miss an exam, you will receive a zero. Exceptions may be made (at my discretion) for extraordinary circumstances.

**Academic Honesty:**

Copying or extensive collaboration on assignments is not permitted and may result in failure of the course and expulsion from the University. You may discuss approaches to solving a problem, as long as the discussion remains above the level of specific Java instructions. You may also seek aid in resolving compiler messages. However, if you copy a code fragment verbatim, you are likely committing academic dishonesty. Obtaining a solution on the Internet or elsewhere and submitting it as your own work is plagiarism and will result in severe disciplinary measures. Be sure you can explain every line of every program you submit.

Consult [MU's Academic Dishonesty Policy](#) for more details.

**Expectations**

This is a 100-level course, but it is definitely not easy. It is substantially more difficult than CS 161. Becoming a good computer scientist takes practice. I expect you to attend class regularly, read the text, and participate in class. This is a cumulative course in a technical subject that has its own vocabulary. Pay attention, schedule enough time, and get help early.

Some (not all) weeks we will meet in the Linux lab for hands-on practice. I will give you the handout describing the lab activity at a class before the lab. I expect you to read through it before you come to lab and sometimes do some pre-work to get...
ready for lab. This will make the lab period much less stressful. You are expected to remain in the lab for the full lab period or until you have successfully completed all work. Most assignments will require further work outside the lab period. Expect to spend considerable time on the programming assignments outside class.

This is a computer science course. I expect you to be comfortable using the web, email, and Eclipse. I expect you to check your email on cs regularly and at least once a day. Examples, answers to questions other students have asked or problems I’ve seen, and other helpful information will be available through email or on the course web page. Take advantage of these resources.

**Course Web Site:** Lots of information about the course and helpful resources can be found at the course web site: http://cs.millersville.edu/~schwartz/csci-162/