Meeting Times and Location:
Section 1: T 8-8:50AM Roddy Hall, Rm 136 or Lab (Caputo 130)
     TH 8-9:50AM Roddy Hall Rm 147
Section 2: T 10-11:50AM Roddy Hall, Rm 136 or Lab (Caputo 130)
     TH 10-11:50AM Roddy Hall Rm 147

Office Hours: My office hours are Tuesdays and Thursdays from noon-1pm, Wednesdays 11am-noon and 1pm-3pm. 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 871-4308. 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.


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 (CAP 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 AutoLab 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 to AutoLab for possible partial credit. 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 Millersville email 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.

**Title IX Reporting Obligations**

Millersville University and its faculty are committed to assuring a safe and productive educational environment for all students. In order to meet this commitment, comply with Title IX of the Education Amendments of 1972, 20 U.S.C. §1681, et seq., and act in accordance with guidance from the Office for Civil Rights, the University requires faculty members to report to the University's Title IX Coordinator incidents of sexual violence shared by students. The only exceptions to the faculty member’s reporting obligation are when incidents of sexual violence are communicated by a student during a classroom discussion, in a writing assignment for a class, or as part of a University-approved research project. Faculty members are obligated to report to the person designated in the University Protection of Minors policy incidents of sexual violence or any other abuse of a student who was, or is, a child (a person under 18 years of age) when the abuse allegedly occurred.


**Counseling Resources**

Students sometimes face mental health or drug/alcohol challenges in their academic careers that interfere with their academic performance and goals. Millersville University is a caring community and resources are available to assist students who are dealing with problems. The Counseling Center (717-871-7821) is an important resource for both mental health and substance abuse issues. Additional resources include: Health Services (871-5250), Center for Health Education & Promotion (871-4141), Campus Ministries, and Learning Services (717-871-5554).

**Course Web Site:** Lots of information about the course and helpful resources can be found at the course web site: [http://csweb.millersville.edu/~sschwartz/courses/csci-162/](http://csweb.millersville.edu/~sschwartz/courses/csci-162/)