

CS 122 section 1, Winter 2013

Instructor: Michael Kowalczyk

Office: 1127 New Science Facility

Office Phone: 227-1600

Office Hours: 11:00am – 11:50am MWR and 10:00am – 10:50am Friday, or by appointment

Email: mkowalcz@nmu.edu

Class Meetings: 12:00noon – 12:50pm MWRF in 1205 New Science Facility

Course Website: <http://cs.nmu.edu/~mkowalcz/cs122>

Overview:

This course (which is a continuation of CS 120) provides an opportunity to further develop fundamental programming skills. Upon successful completion of this course, a student should be able to:

- Solve programming problems through the use of nested loops, 2D arrays, and recursion
- Write programs that consist of several classes
- Distinguish between the runtime behavior of primitive values and pointers
- Analyze simple algorithms and provide runtime estimates using $O(\cdot)$ notation
- Explain the difference between a class and an object
- Write a simple data structure (such as a linked list or stack) from scratch
- Contrast interfaces with inheritance, identifying the respective strengths of both

Evaluation of these learning outcomes will be done through projects and written assessments (quizzes and/or the final exam).

Prerequisites:

CS120, some equivalent, or instructor permission

Textbooks:

We won't need a textbook for this course. If you feel the need for readings beyond whatever I supply, let me know and I'll dig up some supplementary materials or point you in the right direction. If you need to brush up on CS120 topics, go to my website at <http://cs.nmu.edu/~mkowalcz/> and look at the materials for different offerings of CS120 I have taught. The library also has several (electronic) books on programming in Java.

Equipment:

You will need a laptop computer with a text editor and the JDK (Java). If for some reason you don't have these, follow the installation instructions at <http://cs.nmu.edu/~mkowalcz/cs120/hwk0/>. I also assume that you have a Euclid account. See me if you don't.

Grading:

Grades will be based upon projects, in-class and take-home assignments and/or quizzes, a written final exam, and class participation. The breakdown is as follows:

- 40% Projects
- 25% Quizzes and mini-assignments
- 25% Final
- 10% Participation

Late Policy:

Deadlines are strictly enforced. Once I close the hand-in directory for a project, no further submissions or revisions will be accepted. I therefore expect you to hand in your work (even if incomplete) well before the deadline. You can always submit revisions to your work as often as you like until I close the hand-in directory. In the case of mini-assignments, you must submit a serious attempt by the deadline in order to have the opportunity to fix your errors later for credit.

Exam Date & Schedule Conflicts:

The final exam will be on Monday, April 29 from 12:00noon until 1:50pm. Any conflicts with the exam (due to religious observances, other coursework, intercollegiate athletics, etc) must be made known to me within the first two weeks of the semester.

Laptop Use:

Typically, a class meeting in this course will involve a short lecture and discussion of some new programming concept, followed by time to practice that concept on your own. During the lecture portion, I will need your complete attention, and will ask you to close your laptop. Of course, you will need to bring your laptop to class in order to do the exercise after the discussion portion.

Academic Conduct:

Academic dishonesty of any sort will result in a letter to the Dean of Students, and may include other additional consequences. Every assignment must be written entirely by you. There are only two instances where including program code from elsewhere is acceptable:

- You may include any code that I give out in my lab tutorials and lecture notes, without citation.
- Any other code that you didn't author **must** be accompanied with a full citation (this includes people, websites, books, etc.). Indicate clearly which lines of code you didn't write, and where they came from.

The best way to help others succeed in the course is by discussing and explaining concepts.

Disability Services:

If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Disability Services Office by: coming into the office at 2001 C. B. Hedgcock; calling 227-1700; or e-mailing disserv@nmu.edu. Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and University guidelines.