

CS 120 Computer Science I, Winter 2015 (CRN: 10197) (Lec. 03)

SYLLABUS January 13, 2015

Instructor: Jeffrey Horn, email: jhorn@nmu.edu

office: 2202 Jamrich Hall

phone: 227-1607

Office Hours: <http://euclid.nmu.edu/~jeffhorn/Schedule/schedule.html>

Textbook:

- None required.
- Optional, suggested: (to be announced...)

Classroom: Jamrich (JXJ) 3309

Meeting Times: 7-8:40pm, TuTh

Prerequisites: Math 100 or equivalent or permission of instructor

Our web page: <http://euclid.nmu.edu/~jeffhorn/Classes/CS120/Winter2015/>

(I will use the web page EXTENSIVELY, posting everything I can up there as soon as possible. This includes all electronic forms of handouts, assignments, solutions, sample tests, etc. Also I will post announcements, links to interesting, topic-related sites, etc. So please check our page regularly! At the very least, twice a week. We will also have a WebCT page for posting grades, etc.)

TOPICS:

- INTRODUCTION: What is *Programming*, a *programming language*, etc.? (Example: programming a robot)
 - The Java and OO Models of Computation
 - Constants and variables.
 - Classes, Objects, Methods.
 - Loops and conditional branching.
 - User interaction.
 - Nested Objects.
 - Arrays
 - Strings
-

GRADING:

40% Programs.

20% Quizzes

20% Exams in-class and take-home

20% Final exam, comprehensive.

Late Policy: For programs and homeworks, 5% off for each day late (counting only days that the university is open; e.g., **not** weekends or snowdays). But of course I cannot accept them after solutions are handed out! As for exams, those cannot be made up except under the most severe and extenuating emergencies! Don't take a chance if you don't have to! (If we have "enough" assignments and/or quizzes, I will drop the lowest grade in that category.)

COMPUTING FACILITIES:

Hardware: NMU IBM ThinkPads, NMU Apple MacBooks

Software: TextPad program editor (for Windows machines) or TextWrangler (for Mac OS), plus Oracle's free Java Platform to compile programs. (Instructions on downloading the free software will be made available during the first week of class.)

DISABILITY SERVICES

If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (227-1700). 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.

LIBERAL STUDIES, DIVISION V

This course satisfies the Formal Communication Studies requirement.

This course is designed to introduce students to the ways in which information and ideas are expressed using a communication system other than English. Such courses should foster the student's ability to conceptualize and communicate in an orderly, rational manner. Characteristics of a communication system include: 1) possession of a grammar; 2) operation from an established set of rules; 3) reasoning properties such as deduction, inference drawing and problem solving. This includes courses in languages and those in which the central focus of the course is on statistics, computers or formal logic.

LAPTOP (and mobile device) CLASSROOM USE POLICY

As a computer scientist I am of course devoted to mobile computing and communication devices (that is, *gadgets*). However, this course involves some deep concepts concerning the nature of computation, information, and communication, and indeed even human nature. My experience is that most people, myself most especially, cannot be expected to really grasp these concepts in the classroom without long periods of unbroken attention. As much as I value electronic-based multi-tasking (and I do think that we need to multi-task throughout the modern day), I have now come to the conclusion that certain insights into the universe cannot be conveyed while multi-tasking. Period.

Therefore, my policy is to allow laptop use during certain portions of the class period, as I announce them. So there will be times, every class meeting, when I will demand that all laptop covers be closed (at least lowered so that they cannot be seen by anyone). Such times will last perhaps 20-30 minutes, after which students will be allowed to open up and use their laptops for class exercises or lab work (the current assignment). If a student absolutely needs to use his or her laptop for note-taking during the "deep lectures," then he or she can request individual permission from me.

As for cell phones, PDAs, handheld game-consoles, iPods, etc., use of such devices will also not be allowed during "deep lecture" (cell phones can be set to "vibrate" or to some other inaudible notification mode) for receiving

emergency calls. There will be break times of five to ten minutes every half hour or so for students to check for messages, make short calls, etc.

(This document can be found online at <http://euclid.nmu.edu/~jeffhorn/Classes/CS120/Winter2015/syllabus.html>).