

CSCI 121 – Computer Science II

Spring 2010

Instructor: Dr. Matthew Lang
Office: PPHAC 213
Email: lang@cs.moravian.edu
Office Phone: (610) 625-7786
Google Voice: (484) 893-0782

Class: MWF 11:45–12:55 in Reeves 212
Lab: Thursday 12:45–2:45 in PPHAC 114
Office Hours: MW 1–2:30 (or by appointment)

Course Description

This course is a continuation of Computer Science I with an emphasis on data and procedural abstraction. The major topics of this course are programming in the object-oriented paradigm, validation and verification of software, linear data structures, and recursion.

Course Objectives

At the completion of this course, you should be able to:

- implement specifications of Java classes.
- validate classes via testing and verify classes via reasoning.
- use object-oriented techniques to refine an abstract specification into a set of Java classes and interfaces.

Texts

Required: “Head First Java” (2nd edition) by Sierra & Bates

Schedule

Topic	Weeks
OO principles and Java	4
Validation and Verification	1
Linear data structures	2
Inheritance and polymorphism	4
Exceptional behavior	1
Collections and containers	1
Recursion	2

Attendance Policy

This course does not have a rigid attendance policy in the sense that there is a rule stipulating the number of lectures that you must attend. However, please do not take this as a license to never show up to class; I expect you to be at each class meeting. Your attendance in lecture is important (beyond the usual reasons) in that homeworks, due dates, and readings will be assigned in person during lecture.

Attendance in graded lab sessions is mandatory. You may assume that you must show up to each lab; if a lab is optional, I will let you know beforehand.

Academic Honest Policy

Please read and understand the College’s Academic Honesty Policy (which you can find in the Student Handbook). I will let you know what materials are appropriate to use for reference for specific assignments

when they are assigned. For example, in the lab, you will generally be prohibited from using the Internet as a reference while doing lab assignments.

Since collaboration with your colleagues will be an important part of your careers, collaboration is permitted on all graded assignments (with the exception of exams).

However, unless I state otherwise, you must turn in your own copy of each assignment *in your own writing*. If the ideas/algorithms expressed in an assignment are not entirely your own (*i.e.*, you worked with one of your colleagues), you must include a note stating who you worked with and the percent contributions of everyone who contributed to the work (including your contribution).

Though I encourage collaboration on assignments, you should not *rely* on each other; you are ultimately responsible for your learning and it is expected that the work that you present to me is a reflection of your understanding of the material.

Grading Policy

There are four components to your grade:

- **Projects:** There will be a few large programming projects that you will be expected to complete this semester. **Weight: 30%**
- **Homework:** Homework will be handed out periodically throughout the semester. **Weight: 20%**
- **Labs:** Each week we will meet in the lab and you will be given a series of tasks that are to be completed before leaving the lab. **Weight: 10%**
- **Tests:** There will be two midterm exams given during the semester on Friday, February 26 and Friday April 23. **Weight: 20%**
- **Final:** A cumulative final exam will be given on Thursday, May 6 at 1:30. **Weight: 20%**

Other policy matters:

- **Grading Scale:** I will use the standard grading scale with pluses and minuses to assign grades.
- **Late Homework:** I will accept homework beyond its due date with the penalty of 30% of the assignment's value per day. For example, if a homework is worth 10 points and it is turned in two days late, the maximum amount of points one can receive is 4 points.
- **Lab/Exam Absence:** If you are going to miss a lab or exam due to conflict, you must let me know before the lab or exam. If you miss a lab or exam due to some other circumstance, you must let me know as soon as possible and provide me with documentation. Valid circumstances include events like illness and family trauma. Invalid circumstances are events like hangovers and faulty alarm clocks.
- **Academic Accommodations:** Please let me know immediately if you have any disability that requires accommodation.

This syllabus is subject to change.