CS 105

Fall 2006
TR 10:20 – 11:30 PH-235
Lab T 2:20-3:50 PH-114
http://www.cs.moravian.edu/cs105
Office Hours: MF 10:20-11:30, R 1:30-2:30

CS 105. Fundamental Ideas in Computer Science
An introduction to several of the major ideas in the discipline of computer science. Emphasis is placed upon contributions which computer science has made to contemporary society. Topics covered include physical and logical aspects of computers, algorithms and problem solving, an introduction to programming, simple computer architecture, and additional topics central to the discipline. These topics are supplemented by laboratory exercises in which students create small programs or utilize existing programs. Recommended for students other than those intending a major or minor in the department. (F2)

Instructor

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Goals

- You will become familiar with historical and current aspects of computers and computing technology.
- You will become familiar with Unix environment.
- You will be exposed to a variety of quantitive applications of computing in areas such as mathematics, science, finance, sociology, etc.
- You will become familiar with various computing tools appropriate for quantitive analysis, including the ability to analyze and generate both numeric and graphical depictions of data.

Text

The textbook for the course is *Connecting with Computer Science*, by Anderson, Ferro, and Hilton.

Prerequisites

There are no specific prerequisite courses, but students should be familiar with key algebraic mathematical concepts such as numbers, functions, and polynomials.

Assignments

Assignments in this course will consist of short homework sets, individual and group labs and projects, and tests and quizzes.

Homework

A homework set will typically be a small set of questions due the next class period. Each homework (non-project) will be graded out of a possible 100 points. Late homework will be penalized with the same schedule as late projects (see below).

Quizzes

Quizzes are short, usually a two or fewer short answer type "questions". Such quizzes are often attached to the reading assignments and may be announced or a surprise.

Projects

Projects will be significantly larger assignments. A completed project will typically involve a short report the problem being analyzed, the methods and tools used as part of the investigation, and any conclusions that were drawn from the project. There will be a mix a individual and group projects.

- Projects will be graded out of 100 points, but will be weighted to reflect its relative complexity. Projects will be graded on correctness (˜70%), style (˜20%), and documentation (˜10%).
- If an assignment is one *class-day* late, it will be penalized 10%. If it is no more than *class-week* late, it will be penalized 50%. After one class-week, it will be worth very little, if any, credit.

Tests

No makeup exams will be given. Students missing one or more tests, in a properly excusable fashion, will be graded based on the available scores as the total score. The hour exams will likely be closed book and closed notes, unless explicitly stated otherwise. The final exam will likely be a mixture of open and closed book and notes.

Computer Resources

The primary computer resources will be the Unix-based Sun Solaris workstations on MoCoSIN in PH-114.

You are expected to comply with all MoCoSIN, CIT and campus policies with respect to use of the computer resources. This includes, but is not limited to, such policies as not locking workstations, not using an account other than your own, etc.

Grading

Weighting

Labs and Projects	25
Homework and Quizzes	20
Hour Exams	30
Final Exam	25
Total	100 %

Policies

- Incomplete grades will **not** be assigned for failure to do the work as required during the semester.
- Attendance is very important, and pop quizzes (especially reading quizzes), which would count in the homework category, may spontaneously occur. You are responsible for everything discussed in class.

Important Dates

Aug 28	M	First day of classes
Sep 4	M	Labor day–no classes
Sep 5	T	Last Day to Add/Drop
Sep 28	R	**Hour Exam I**
Oct 6	F	*MidTerm*
Oct 7–10	S–T	Fall Recess
Oct 26	R	**Hour Exam II**
Oct 27	R,F	**CCSCE-06**
Nov 9–10	R,F	**CCSCSE-06**
Nov 10	F	Last Day to Withdraw with a W
Nov 21	T	**Hour Exam III**
Nov 22–26	W–U	Thanksgiving Break
Dec 7	R	Last Class Day
Dec 11	M	Last Day of Classes
Dec 12,	T	Reading Day
Dec 13–16	W–S	Final Examinations
Dec 17	U	Reading Day
Dec 18–19	M–T	Final Examinations

General

- Keep backups of all assignments.
- Special circumstances, will, of course, be considered on an individual basis. Please see us as soon as possible if any such circumstances arise.
- All work, unless explicitly stated in the problem definition, is to be an individual effort. Students are encouraged to discuss approaches so long as the final submission has a single, clearly identifiable author. Violations of this will be dealt with as a case of academic dishonesty, see below.

Academic Dishonesty Policy

Students are encouraged to read and understand the college policy on academic honesty. Violations of this policy will certainly result in reduced (0?) scores on the assignments and may result in a failure of the class. In addition, students are expected to read and comply with the course specific policy on improper collaboration.

Terms and Conditions

I consider this syllabus to be a contract between myself as instructor and you as student. Therefore, I will do my best to adhere to the policies herein. However, if the circumstances warrant, there may need to be changes. Such changes will clearly be communicated to the class.