Endicott College
Beverly, Massachusetts
School of Arts and Sciences
Computer Science Department
Course Syllabus

Course #:	CSC 160.01
Course title:	Introduction to Programming
Credits:	4
Pre-requisites:	None
Semester:	Fall 2014
Meeting times:	Lectures T/Th 11:00am–12:15pm in LSB 312
	Labs T/Th 9:00–10:50am in LSB 312
Textbook:	Starting Out with C++ Early Objects (8th ed.)
	Gaddis, Walters, and Muganda, 2013; ISBN: 978-0133360929
Web page:	http://hank.feild.net/courses/2014-fa/csc160
Instructor:	Henry Feild, Ph.D.
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Officie hours:	Wed. 10am–12pm and 1–2pm; other times by appointment

Catalog Description

Provides an introduction to computer programming concepts and functions. Introduces problem-solving methods and algorithm development using software programming. Includes procedural and data abstractions, program design, debugging, testing, and documentation. Covers data types, control structures, functions, parameter passing, library functions, and arrays. Weekly programming laboratory exercises in C++. *Required for CSC majors and minors. Satisfies the Quantitative Reasoning Requirement.* No prerequisites.

Learning Outcomes

At the completion of this course the student should be able to:

- demonstrate an appreciation for the practice and theory of programming languages
- demonstrate mastery programming in C++
- apply problem solving skills and program modeling techniques
- use basic programming concepts, i.e.: program structure and flow control, simple internal data structures, program switches, iteration, selection and functions
- appreciate the need for documentation, brevity, and memory usage in programming

Teaching/Learning Strategies

This course will consist of a mixture of lectures, labs, and discussions. Students are expected to complete homework, programming assignments, and in-class exercises. Grades will be largely based on the contents of a portfolio.

Outline

Week	Dates	Topic
1	Sep. 4	Design and pseudo coding
2	Sep. 9, 11	Displaying data
3	Sep. 16, 18	Interacting with users; **Quiz 1**
4	Sep. 23, 25	Branching
5	Sep. 30	Loops
	Oct. 2	**Exam 1**
6	Oct. 7, 9	Loops
7	Oct. 14, 16	Functions
8	Oct. 21, 23	Functions; **Quiz 2**
9	Oct. 28, 30	Classes and Structs
10	Nov. 4, 6	Faux GUIs
	Nov. 11	**Exam 2**
11	Nov. 13	Arrays
12	Nov. 18, 20	Arrays
	Nov. 25, 27	*No class—Thanksgiving break*
13	Dec. 2, 4	Pointers; **Quiz 3**
14	Dec. 9, 11	Ruby; Review
	Dec. 16	**Final Exam** (cumulative; 10:15am–12:15pm in LSB 312)

Grading

Grading is as follows.

Exam 1	5%		**Quizzes**	3%
Exam 2	5%		**Portfolio**	70%
Final Exam	7%		**Promptness**	10%

			89–87	=	**B+**	79–77	=	**C+**	69–67	=	**D+**	
100–94	=	**A**	86–83	=	**B**	76–73	=	**C**	66–63	=	**D**	59–0 = **F**
93–90	=	**A-**	82–80	=	**B-**	72–70	=	**C-**	62–60	=	**D-**	

Required Texts/Technology

There is a required text (see above). Student-owned technology is not required as LSB 312 is equipped with the necessary software. However, students are encouraged to set up their com-

puters with a text editor and C++ compiler in order to work on assignments outside of LSB 312. A guide on how to do this is available on the course website.

Portfolio

A portfolio containing a mix of required and optional student work will be used as the basis of a large portion of the student's final grade. Portfolios are assessed based on a student's demonstration of key skills, such as master of specific core concepts and more general areas such as problem solving. There will be several portfolio reviews throughout the semester. Students may submit additional or re-worked assignments to demonstrate these skills and accrue more points. A full description of the portfolio is available on the course website.

Late Policy

Portfolios may be submitted incomplete or late, however doing so will cause a penalty of 20% against the Promptness category of the course grade. If every portfolio is submitted late or incomplete, a grade of 0% Promptness will be given.

A portfolio is considered incomplete if it does not contain one or more of the required documents. It is late if it is submitted later than the deadline.

ADA Policy

If you as a student qualify as a person with a disability as defined in Chapter 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, the Americans with Disabilities Act Amendments Act of 2008 (ADAAA), you are strongly encouraged to register with the Center for Teaching and Learning. The Center for Teaching and Learning is located in the Diane M. Halle Library room 201 and online at http://www.endicott.edu/academicresources. As a student registered with the Center for Teaching and Learning, it is your responsibility to present your accommodation letter to your instructor at the beginning of each semester.

Course Expectations

For each credit hour, students are expected to spend a minimum of two hours on work out-side of class each week. For this four credit course, that is a minimum of eight hours each week.

Students must review the Academic Calendar published by the Registrar's Office online at: http://www.endicott.edu/Academics/AcademicCalendar.aspx. Class attendance is expected of all students up to and including the last day of scheduled classes in the semester. Students must plan accordingly.

Attendance/Participation

Students should attend every class and lab. However, students may miss up to three classes/labs excused or unexcused, without notifying the professor. In-class exercises cannot be made up

for credit and office hours will not be used to cover material missed due to an absence. Participation will also be affected. **Absences beyond three classes may result in up to a 5% penalty on the final course grade per absence.** Please contact the professor in the event of extenuating circumstances resulting in the need for a prolonged absence.

While in class, students are expected to be fully present and engaged. Using phones or lab computers in class for any non-class purpose—e.g., texting, making calls, checking email, watching videos, etc.—is strictly forbidden. Laptops are not to be used in class unless otherwise indicated. Side discussions, covert texting, or any other failure to pay attention will negatively impact your grade. Violators will be warned once, and asked to leave the lecture thereafter. Being asked to leave will be counted as an absence, regardless of when during the class the incident occurs. Consistent violations will result in failure of/dismissal from the class.

Participation in classroom activities and group work is tallied within the portfolio. Students who miss class or are not engaged in activities will not receive participation points.

Working with Others

You may discuss assignments with other students, but you *may not* share code, or view another student's assignment code prior to submission. *All code you submit must be your own.* If you are having trouble with a concept and would like help from a classmate, talk it out, draw it out, or come up with a similar example to code up that is not part of the assignment itself. Submitting someone else's code, in part or in whole, will be considered a violation of the Academic Integrity Policy (see below). Keep in mind, it is generally quite easy to detect when the same code has been submitted by two students, even when the time is spent to make the code look different. *Also note, you must be able to explain all of your submitted code to the professor if asked.*

Academic Integrity

Students are expected to abide by the *Academic Integrity Policy* of Endicott College. Cheating will result in failure of the assignment or course or dismissal from the College. Make sure to always cite sources and if you confer with classmates on an assignment, list who those individuals are at the top of your submission. You are expected to be capable of explaining any code you submit to the professor when asked. Submitting identical or near identical assignments, submitting code that is not your own (whether or not you indicate whose it is), not making clear who you consulted with, or not being able to explain your submitted code when prompted will all be considered a violation of the Academic Integrity Policy.

Subject to Change

This syllabus is subject to change at the discretion of the professor. Updates will be announced and the most recent version will be available on the course website.