

Towson University: Department of Computer and Information Sciences

COSC 236: Introduction to Computer Science I, Fall 2006

<http://triton.towson.edu/~hhochhei/classes/fall106/236>

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Office: YR 425, Phone: 410 704 3090, Office Hours: Monday 1:45PM-2:45PM, Wed: 11AM -12PM, Thur: 4-5PM, or by appointment.

Class Time: Mon., Wed. 12:30-1:45. Lab: Tues., 12:30-2:20, **Room:** Lectures: YR 205, Labs: YR 305

Textbook: T. Gaddis , Starting out with C++: From Control Structures through Objects (5th Edition) , Addison-Wesley .

Introduction This course provides an introduction to problem solving, algorithm development, and computer programming. We will use C++ to explore concepts such as iteration, flow control, data types, functional decomposition, file input/output, and basic object-oriented programming concepts.

Organization Coursework will consist of weekly lab assignments, two tests, and a final exam.

Policies

- All homework will be handed in on the due date. Late assignments will not be accepted. However, since the material in this class is cumulative, you should complete all assignments, even if you will not get credit for them.
- Documentation is a crucial part of effective software development. All assignments should be documented, using styles like those discussed in class or in the text. Solutions will not be considered complete, and will therefore not get full credit, without proper documentation.
- Your work should be easy to read: there are many papers to be graded and we do not have the time to decipher cryptic handwriting. If possible, type your work. Otherwise, please write neatly and clearly. In any case, please explain your answers clearly and succinctly. No credit will be given for answers that we cannot understand.
- The work you turn in must be your own. You can feel free to discuss assignment questions with others, and you may need to work in teams during lab times, but the written assignments that are turned in must be your own work. Cheating in any form - including copying someone else's work or letting your work be copied - is unacceptable at Towson University. Do not turn in work that has been copied from somebody else, do not let your work be copied. Anyone found cheating (on either side, copying or being copied) will receive an F for the course and a letter to the dean will be sent. Any incidents of cheating will be handled through appropriate administrative channels.
- Attendance will be taken at each class session. If you miss a class, it is your responsibility to make up the material, to get information about assignments, and to complete those assignments. Requests for permission to make up exams must be supported by written verification of the reason for the absence.
- Towson University does not post grades. The department office will not inform you about your grade after a course is completed since you can check your grades online.
- University policy states that students may not repeat a course more than once without prior permission of the Academic Standards Committee.
- No food or drink is allowed in the labs; no food is allowed in the classrooms.
- Please don't use cell phones, pagers, laptops, etc. in class.

Grading

- Homework: 30%.
- Test 1: 20%.
- Test 2: 20%.
- Final (Wednesday December 13): 30%.

Grading Policy

A: 93-100 A-: 90-92.9 B+: 87-89.9 B: 83-86.9 B-: 80-82.9
 C+: 75-79.9 C: 70-74.9 D+: 65-69.9 D: 60-64.9 F: < 60

Syllabus

- Introduction to basic computer organization.
- Data types, basic operators, expressions.
- Control Flow: if, else, for, do, while, switch, break, etc.
- Functions: Definitions, prototypes, functional calls, parameter passing
- Arrays: declaration, parameter passing, multi-dimensional arrays
- Structs and Classes: definition, uses, differences
- Recursion
- Other topics as time allows: comparison with other programming languages

Schedule Approximate - dates and topics subject to change.

Week	Date	Topic	Reading
1	August 28	Assessment, Introduction, Learn online, Developer's studio	Chap. 1
2	Sep 6 (no class Sep. 4)	Intro to C++. syntax and semantics Program Development	Chaps. 2
3	Sep 11	Expressions and Interactivity Expressions	Chap. 3
4	Sep 18	Basic control flow: if/else, switch	Chap. 4
5	Sep 25	Looping: while, do	Chap. 5
6	Oct.4 (No Class Oct 2)	Looping: for.	Chap. 5
7	Oct.9	File Input/Output, Review	Chap. 3
8	Oct.16	Functions, <i>Test 1, Wednesday Oct.18</i>	Chap. 6
9	Oct.23	Functions, continued	Chap. 6
10	Oct.30	Arrays: introduction	Chaps. 7-8
11	Nov. 6	Two-dimensional arrays	Chaps. 7-8
12	Nov. 13	Arrays and functions	Chaps. 7-8
13	Nov. 20	Lists/Arrays, <i>Test 2: Monday, Nov. 20</i>	
14	Nov. 27	Structs, Classes	Chap. 11,13
15	Dec. 4	C++ Review , Recursion	Chap. 19

Final Exam: Wednesday, December 13

This schedule is approximate and subject to change.