## COM S 229 (1) Advanced Programming Techniques Spring 2014

**Course Topics:** Object-oriented programming experience using a language suitable for exploring advanced topics in programming. Topics include memory management, parameter passing, inheritance, compiling, debugging, and maintaining programs. Significant programming projects. The first half of the course will cover the C programming language and the second half will cover C++.

Class Meeting Time & Place: MWF: 12:10–1:00pm; Carver 205

Instructor:	Derrick Stolee
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Office:	416 Carver
Office Hours:	M: 1:10–2:30pm, W: 11:00am–12:00pm , F: 10:00–11:00am (or by appointment)
Homepage:	http://www.math.iastate.edu/dstolee/229/

## Suggested Books:

- The C Programming Language by B. W. Kernighan and D. M Richie.
- The C++ Programming Language by B. Stroustrup.
- The C++ Standard Library by N. M Josuttis.

Prerequisites: COM S 228, credit or enrollment in MATH 166.

**Projects:** There will be two large individual projects, the first in C and the second in C++. Each is split into two parts and the due dates are:

Project 1: Will be assigned Jan. 27th. Project 2: Will be assigned Mar. 14th.

- Part A due Feb.21st, 11:59pm. Part A due Apr.11th, 11:59pm.
- Part B due Mar. 12th, 11:59pm. Part B due Apr. 30th, 11:59pm.

**Exams:** There will be three in-class exams and one final exam. The dates are as follows:

Exam 1: Feb. 14th, 12:10-1:00pm. Exam 2: Mar. 14th, 12:10-1:00pm. Exam 3: Apr. 18th, 12:10-1:00pm. Final Exam: Thursday, May 8, 12:00-2:00pm.

**Grading:** The course grade will be based on two projects, one in C and one in C++ (25% each), three in-class exams (10% each) and the final exam (20%). Your final exam score can replace your lowest in-class exam score (and hence no make-up exams will be allowed).

The overall letter grade for the course is assigned based on the weighted total score, and a curve decided at the end of the semester. The classic ten-point scale gives you a lower bound on your grade: if your overall score is 0.90 or above, then you are guaranteed a grade of A- or higher; if your overall score is 0.80 or above, then you are guaranteed a grade of B- or higher; etc. Historically, letter grades have been shifted in favor of the students.

Late Policy: Items turned in within 24 hours of due date will receive 75% credit. Items turned in within 24 and 48 hours will receive 50% credit. Items turned in later than 48 hours after the deadline will receive no credit.

More information is available on the course web page.

## **University Policies**

Academic Dishonesty The class will follow Iowa State University's policy on academic dishonesty. Anyone suspected of academic dishonesty will be reported to the Dean of Students Office. http://www.dso.iastate.edu/ja/academic/misconduct.html

**Disability Accommodation** Iowa State University complies with the Americans with Disabilities Act and Sect 504 of the Rehabilitation Act. If you have a disability and anticipate needing accommodations in this course, please contact (instructor name) to set up a meeting within the first two weeks of the semester or as soon as you become aware of your need. Before meeting with (instructor name), you will need to obtain a SAAR form with recommendations for accommodations from the Disability Resources Office, located in Room 1076 on the main floor of the Student Services Building. Their telephone number is 515-294-7220 or email disabilityresources@iastate.edu . Retroactive requests for accommodations will not be honored.

**Dead Week** This class follows the Iowa State University Dead Week policy as noted in section 10.6.4 of the Faculty Handbook http://www.provost.iastate.edu/resources/faculty-handbook.

Harassment and Discrimination Iowa State University strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon race, ethnicity, sex (including sexual assault), pregnancy, color, religion, national origin, physical or mental disability, age, marital status, sexual orientation, gender identity, genetic information, or status as a U.S. veteran. Any student who has concerns about such behavior should contact his/her instructor, Student Assistance at 515-294-1020 or email dso-sas@iastate.edu, or the Office of Equal Opportunity and Compliance at 515-294-7612.

**Religious Accommodation** If an academic or work requirement conflicts with your religious practices and/or observances, you may request reasonable accommodations. Your request must be in writing, and your instructor or supervisor will review the request. You or your instructor may also seek assistance from the Dean of Students Office or the Office of Equal Opportunity and Compliance.

**Contact Information** If you are experiencing, or have experienced, a problem with any of the above issues, email academicissues@iastate.edu.