

General Information

Instructor:	Associate Professor Harlan B. Russell (harlanr@clermson.edu) 316 Fluor Daniel Building, Tel: 656-7214 Office Hours: Thur., and Fri., 3:30-5:00 p.m. Other times by appointment
Grader:	Aditya Bettadapura (abettad@clermson.edu)
Lecture:	Mon., Wed., and Fri, 1:25 – 2:15 p.m. 100 Earle Hall.
Home Page:	http://bb.clemson.edu
Prerequisites:	CPSC 1110 Introduction to C Programming, or equivalent.
Required textbook:	Adam Hoover, <i>System Programming with C and Unix</i> , Addison-Wesley Publishing, 2009.
Required computer:	Students are required to have a laptop with Linux installed for completing projects. Ubuntu Linux is preferred: http://www.ubuntu.com/

Course Description

This course has three goals. First, it teaches the tools available in a Unix/Linux operating system for program development. These tools include standard libraries, system calls, the shell environment, system programs, and the basic Unix/Linux file system structure. Second, it is intended to rigorously develop the C and Linux programming skills of students. Towards that end, there will be frequent programming assignments. Third, it is intended to introduce students to code reading and the principles of code management. Each week in class, time will be spent examining existing code, to fix bugs, extend features, and to learn programming style and principles.

Course Outline:

Part 1: Details of the C Programming Language

- System Programming and Debugging
- Bit Models and Memory Maps
- Arrays, Strings, Pointers, and Structures

Part 2: System Programming

- I/O: Streams, Buffers, Pipes, and Devices
- Program Building and Code Organization
- System and Process Calls
- Libraries

Tutoring

Tutoring is available for ECE 222 for free through the Academic Success Center (ASC). Tutoring should be used to discuss course materials and ask questions but not as a replacement for class or office hours. Drop-in tutoring will be available weekly. Additionally, limited group and individual ECE appointments will be available. Make sure to come to all tutoring sessions fully prepared with your book, notes, and other class materials. For details on policies, drop-in session information, or to book an ECE appointment, please see the ASC website at www.clemson.edu/asc.

Policies

See the Undergraduate Announcements at <http://www.registrar.clemson.edu>.

Homework: All problem sets are due at the time and date specified on the assignment. No late assignments will be accepted, and they are due at the time class begins.

Machine problems: Submission of machine problems will be electronically, and policies for late submission will be defined for each machine problem. A passing grade in the course will not be awarded without completion of all programming projects.

We encourage you to discuss interpretations of problems and assignments with each other but we expect that you will construct and write up your own solutions to any assignments that you turn in for credit. If students are found to have collaborated excessively or to have blatantly cheated (e.g., by copying or sharing answers or computer code), all involved will at a minimum receive grades of 0 for the first infraction. Further infractions will result in failure in the course and possibly recommendation for dismissal from the university.

For the programming assignments it is okay to talk with your classmates about the ideas. But when it comes time to write up your answers we expect your words and computer code to be yours alone. Do not share your work with your classmates, as they may not have the same work ethic as you do. Do not ask your classmates to share their files with you, either. In the end, your work should be a reflection of what you understand about the topic, presented in your own words and computer code.

Examinations: No make-up exams will be given unless an acceptable reason is presented to the instructor at least one week before the examination date. We shall have three in-class exams, and a final exam. The final is from 3:00-5:30 p.m. on Friday, December 9. In the event of an emergency, the student must make direct contact with the instructor before an exam takes place or an assignment is due, preferably via email. If it is not possible to make arrangements before the scheduled event, then the student must contact the instructor as soon as it is safe and reasonable to do so. It is the student's responsibility to secure documentation of emergencies.

Re-grades: Re-grade requests must be submitted in writing on a separate piece of paper within one week of the return of the graded item.

Grades: Final grades will be based on the following weights: 5% homework, 45% machine problems, 10% for each of the three in-class exams, and 20% final. In addition, all programming projects must be completed to receive a grade of C or higher.

Attendance: You are expected to attend all lectures. If you miss class, you are responsible for the material covered in the lecture and for any assignment made. If the instructor is not present by 10 minutes after the start of the class time, assume that class is canceled.

Any exam that was scheduled at the time of a class cancellation due to inclement weather will be given at the next class meeting unless contacted by the instructor via email or Blackboard. However, assume there is no extension for machine problems unless specifically announced on Blackboard or via email.

Academic Honesty: The following is the official statement of Clemson University on Academic Integrity.

"As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a "high seminary of learning." Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect

of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.”

“When, in the opinion of a faculty member, there is evidence that a student has committed an act of academic dishonesty, the faculty member shall make a formal written charge of academic dishonesty, including a description of the misconduct, to the Associate Dean of Undergraduate Studies. At the same time, the faculty member may, but is not required to, inform each involved student privately of the nature of the alleged charge.”

Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to this class should let the professor know, and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible. You can make an appointment by calling 864-656-6848, by emailing studentaccess@lists.clemson.edu, or by visiting Suite 239 in the Academic Success Center building. Appointments are strongly encouraged – drop-ins will be seen if at all possible, but there could be a significant wait due to scheduled appointments. Students who receive Academic Access Letters are strongly encouraged to request, obtain and present these to their professors as early in the semester as possible so that accommodations can be made in a timely manner. It is the student’s responsibility to follow this process each semester. You can access further information here: <http://www.clemson.edu/campus-life/campus-services/sds/>.

Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran’s status, genetic information or protected activity (e.g., opposition to prohibited discrimination or participation in any complaint process, etc.) in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. This policy is located at <http://www.clemson.edu/campus-life/campus-services/access/title-ix/> . Mr. Jerry Knighton is the Clemson University Title IX Coordinator. He also is the Director of Access and Equity. His office is located at 110 Holtzendorff Hall, 864.656.3181 (voice) or 864.565.0899 (TDD).