

# A290/A590 UNIX and C

## Instructor:

D. Kevin McGrath

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## Office Hours:

Time: check web page Location: LH 415

Appointments are also encouraged, and should be made via email.

## Schedule:

Lecture: Tuesday, 17:45 - 19:00, Thursday, 17:45 - 19:00

## Text:

Kernighan and Ritchie, *The C Programming Language, 2/e*, Prentice Hall PTR, 1988

Oualline, *Practical C Programming, 3/e*, O'Reilly, 1997 (recommended)

Supplementary materials will also be provided.

## Course Objectives:

The course is designed to provide a brief introduction to UNIX and the C programming language. This will include the coverage of command line UNIX, the emacs text editor, the GNU compilers, and introductory C.

The coverage of C will consist of basic syntax, loops, functions (including basic recursion), pointers, arrays, strings, structs, I/O, and an assortment of system libraries.

The UNIX coverage will focus on a command line oriented environment, though X-Windows will be introduced. The emphasis will be on commonly used utilities, such as file system navigation and manipulation, text manipulation, and development oriented utilities.

## Grading:

Attendance is mandatory, and a viable excuse will be needed for each absence after the first. There will be quizzes over the reading material most days. These are not designed to trick you, and will cover the main points of the readings, rather than esoteric details that are only mentioned once.

Please note there is no final exam. There is, however, a final lab, which will cover concepts from the class which I felt that you should take away. This will be take home, during the last week of February.

A grade break down is as follows:

- Quizzes: 15%
- Assignments: 65%
- Final lab: 20%

Within the assignment, more important assignments will have correspondingly more points, and therefore have a larger impact on your grade.

## Labs:

All documentation for the labs will be posted at the latest by Wednesday night by 11:59:59 PM. Questions are encouraged, and while I will not just hand you the solution, I am always willing to point you in the right direction. Questions can be asked in class, sent via email, discussed during office hours, etc. Labs will be due the following Wednesday at 11:59:59 PM.

As will be stated in classes, the due dates are enforced. I'd rather you complete the work and hand it in late than turn in incomplete work. That said, late work will be penalized at the rate of 0.5 letter grades per day late. 3 free late days are permitted, but must be explicitly used by notifying me.

Grading will be based on correctness, clarity, documentation (quality and quantity), and style; presentation counts. You can have the most efficient and elegant solution to a given problem, but if I can't read the code,

that doesn't count for much. Code should be commented, and should be written in a readable style.

**No credit will be given for code which does not compile. Please ensure that your code will compile on the burrow machines prior to submitting it.** The exception to this rule is that if a README file is included, which explains the *reasons* the code does not compile. I understand that, sometimes, errors can be very difficult to eliminate.

**NB: WORK MUST BE YOUR OWN, AND NO ONE ELSE'S.** While I encourage you to discuss problems with your peers, your work must be your own. If you *do* decide to work together, you will get at most 60% of the points possible.

### **Participation:**

Participation is worth a lot. Please participate in class, so that you can earn these points. Participation can take the form of asking questions, answering questions, coming to office hours, asking questions via email, etc. So long as it is clear that you are actively engaged with the class, you will get participation points.

### **Exceptions to the Rules:**

Almost all rules are designed to be broken under the correct set of extraordinary circumstances. I strongly recommend your communicating to the instructor at the earliest possible time any circumstances you feel warrant an exception (e.g. illness, religious holiday, personal and/or family crisis, etc.). Remember that going into hiding is probably the worst strategy you can adopt! There is a direct relationship between the amount of sympathy you can anticipate from an instructor and the amount of time remaining until a given assignment's due-date. Finally, remember that if you are uncomfortable discussing something directly with me (e.g. personal problems) you can always contact someone in the Dean of Students Office and have that individual contact me.

*Please note, all policies within the Computer Science Department Statement on Academic Integrity will be enforced. Please read it if you have not already done so.*