

ENEE 114 Programming Concepts for Engineering (Spring 2007)

Lecture Information:

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| Lecture: | Tu Th 11:00 am – 12:15 pm | EGR 1202 |
| Textbook (recommended): | B. Kernighan and D. Ritchie, <i>The C Programming Language</i> , Prentice Hall. Paul Davies, <i>The Indispensable Guide to C with Engineering Applications</i> , Addison-Wesley. | |
| Class URL: | http://www.ece.umd.edu/class/enee114.S2007/ | |
| Instructor: | Dr. Gang Qu Office: 1417 A.V. Williams Building Phone: 301-405-6703 Email: gangqu@glue.umd.edu | |
| Office Hours: | Tu Th 9:45 am – 11:00 am @ AVW 1417 F 4:30 pm – 5:30 pm @ EAB 0305 | |

Recitation Information:

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|-----------------------------|----------|--------------|--|
| 0101 MW 9:00 am – 9:50 am | EAB 0305 | Eric Yeh | eyeh@mail.umd.edu |
| 0102 MW 11:00 am – 11:50 am | EAB 0305 | Seong C. Lee | sclee423@hotmail.com |
| 0103 MW 12:00 pm – 12:50 pm | EAB 0305 | Kyle T Weber | kweber1@umd.edu |
| 0104 MW 3:00 pm – 3:50 pm | EAB 0305 | Eric Yeh | eyeh@mail.umd.edu |

Grading Policy:

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|----------------------|-----|--|
| Attendance | 5% | (attendance will be checked in both lecture and recitation) |
| Homework | 5% | (3-4 homework assignments) |
| Quizzes | 20% | (three “big” scheduled quizzes and some unscheduled small quizzes) |
| Projects | 25% | (4-5 programming projects) |
| Midterm Exams | 25% | (I: March 6, II: April 17, subject to change) |
| Final Exam | 20% | (comprehensive, Saturday, May 12, 8:00-10:00 am) |

Important Dates:

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| January 24 | Monday | First recitation |
| January 25 | Thursday | First lecture |
| February 6 | Tuesday | Last day of schedule adjustment Last day to inform Dr. Qu about disability and exam/quiz conflict |
| February 28 | Wednesday | First “big” (full recitation) quiz |
| March 6 | Tuesday | First midterm exam |
| March 19-23 | Spring Break | No lecture/recitation |
| April 4 | Wednesday | Second “big” (full recitation) quiz |
| April 10 | Tuesday | Last day to drop with “W” mark |
| April 17 | Tuesday | Second Midterm exam |
| May 2 | Wednesday | Third “big” (full recitation) quiz |
| May 9 | Wednesday | Last recitation |
| May 10 | Thursday | Last lecture |
| May 12 | Saturday | Final Exam (8:00 am – 10:00 am) |

If you have a **documented disability** and wish to discuss academic accommodation with me, please contact me as soon as possible and not later than Tuesday, February 6.

If any midterm, “big” quiz, and the final exam is scheduled on a **religious holiday** that you are compelled to observe and you must make arrangement to take the exam/quiz on a different date, please see me about making these arrangements no later than Tuesday, February 6.

If you are experiencing difficulties in keeping up with the academic demands of this course, contact the Learning Assistance Service, 2201 Shoemaker Building, 301-314-7693. Their educational counselors can help with time management, reading, note-taking and exam preparation skills.

Dissection of the Syllabus:

Heavy Workload Warning:

You can expect a heavy workload in this course, especially if you have never done any kind of programming in the past. Students in prior semesters have reported spending anywhere between 15 to 30 hours per week on programming assignments. The assignments are not necessarily difficult, but they do require lots of time and patience. **Due to the nature of the course, you may not start feeling the heavy workload until late February.**

Recitation:

- In order to learn C and UNIX, it is essential that you **practice** and you can never over-practice. Recitation sections and the associated TA office hours are designed to provide you the opportunity to practice programming with the TAs available to answer your questions on site.
- **Attendance** will be checked this semester in both lectures and recitation sections. It has been the case in all the prior semesters that those students who had the most difficulties were also the same students who regularly missed lectures and/or recitations AND there has also been a strong correlation between final grades and attendance.
- Given the large enrollment of the class, recitation sections are also the places that you turn in and pick up your **homework and exam papers**.
- **Be on time.** Late arrivals will disturb the class as the door to the recitation classroom is at the front of the class. More important, you may miss the quizzes when they are given at the beginning of the recitation.
- For those who miss their recitation for whatever reason, you can (and you are welcome to) attend the next available recitation. We will try to make all the recitation sections synchronized so you will not miss much materials covered in your own recitation. However, it is your responsibility to notify your own recitation TA about this and make arrangement for the missed attendance checking, homework, quizzes, and recitation material.

Attendance: (5%)

- Attendance is **mandatory** for both lectures and recitation sections. In lecture, the attendance will be checked sporadically. In recitation, the attendance will be taken by the TAs every time.
- You will be deducted for each **recorded absence** except for those officially excused by school regulation (<http://www.inform.umd.edu/CampusInfo/Departments/InstAdv/UnivPub/Ugradcat/>).
- If you miss your recitation, but attend a later recitation on the same day. You will not be deducted for absence. But it is your responsibility to inform both your recitation TA and the TA whose section you actually attend about this.

Homework: (5%)

- There will be 3~4 homework assignments. The assignments will be posted on the course webpage and announced in the lecture, normally at least one week before the due date. Homework will be collected and the graded homework will also be returned in the **recitation sections**.
- **Late homework will not be accepted.** If you must miss a recitation where a homework assignment is due, it is your responsibility to find a reliable person to turn your homework in for you or submit it to Dr. Qu or your recitation TA before the due date.
- **Grading.** Both effort and correctness will be counted when your homework is graded. It is important that you do the homework problems in the same order as they are assigned.
- If you **dispute** your score on any homework, you have to contact your recitation TA within one week from the date that your homework is officially returned. If the matter remains unsettled, you have one more week to bring the issue to Dr. Qu with a written request.
- Make sure that you include your full name and student ID on the first page of your homework. Failure to do so will result in late grading/returning of your homework, and you may consequently miss the one-week period to dispute the homework score.
- It is acceptable, and you are encouraged, to discuss homework problems with others, but you have to prepare the final write-up by yourself. Both copying homework and allowing others to copy your homework will be considered as academic dishonesty (see below for more detail in the last item of the Exam section).

Quiz: (20%)

- All the quizzes will be given in recitation sections. There are two types of quizzes: “big” quiz that takes the full 50 minutes slot of the recitation and will worth 5% each; and “small” quiz that takes 5-15 minutes.
- **“Big” quiz:** there will be three “big” quizzes, all scheduled on the Wednesday recitation. In each one, you will be given several questions and asked to write small C programs under UNIX to answer these questions. This includes typing, testing, debugging, executing the program and electronically submitting it to your recitation TA. Normally the “big” quizzes are open book and open notes. However, you will find it hard to review the material and then complete the program in the given time slot (50 minutes).
- **“Small” quiz:** “small” quiz usually consists of a couple of easy questions for you to answer, either with or without using the computer. The policies for “small” quiz are quite flexible and will be specified by the recitation TAs.
- Both “big” quiz and “small” quiz are for individual student. Working in groups, copying other student’s program, or allowing others to copy your work will be considered as academic dishonesty (see below for more detail in the last item of the Exam section).

Project: (25%)

- We will have 4-5 programming projects for this semester. (The three effective ways to learn C: programming, programming, and programming.)
- The project will be posted on the course web page and announced in the lecture. Normally you will have two weeks to complete a project; nevertheless, you are recommended to start early.
- The projects must be done under GLUE UNIX system and submitted electronically. Electronic submission will be automatically time-stamped. Late submission will be accepted but subject to some penalty. Detailed submission information will be available with the project assignment.
- It is acceptable to discuss project ideas with other students, but you have to code by yourself. Both copying project and allowing others to copy your project will be considered as academic dishonesty (see below for more detail in the last item of the Exam section).

Exam: (45%)

- All midterm and final exams will be closed book, closed notes, and no calculators, PDAs, or laptops. Please also turn off the cell phones.
- **There will NOT be any make-up midterm exams.** If you must miss one of the midterm exams, you must get the permission from Dr. Qu at least 48 hours before the exam so that portion of the grade can go to the final exam. Otherwise, 0 (zero) will be counted as the score for each of the missed midterm exams.
- If you **dispute your score on any midterm exam**, you must contact Dr. Qu within one week from the date the exam paper is returned (normally in recitation sections). After this period, no changes will be considered.
- Check **final exam schedule** before enrolling for the course.
- **Academic dishonesty will not be tolerated.** The University Code of Academic Integrity, which can be found at <http://www.inform.umd.edu/CampusInfo/Departments/JPO/> prohibits students from committing the following acts of academic dishonesty: cheating, fabrication, facilitating academic dishonesty, and plagiarism. Academic dishonesty in this class includes outright copying on homework; however, discussing homework problems and exchanging tips is permissible and also encouraged. If there are any take-home exams, discussing the material with anyone, inside or outside of the class, is considered academic dishonesty. Instances of academic dishonesty will be referred to Office of Judicial Programs.

About ENEE 159A:

The newly developed ENEE 159A: Programming Concepts for Engineers II, is intended for students who are comfortable with the fundamentals of procedural programming, in particular data types, variables, loops, conditional statements, and functions. It will cover intermediate topics in procedural programming and fundamentals of object-oriented programming. Programming assignments will be based on Java and C (mostly Java).

Student who successfully complete ENEE 159A will receive 4 credits and will not to take ENEE 114 to satisfy the programming concepts requirement for the Electrical Engineering major.

Space is limited. Contact Dr. Qu or Dr. Shuvra Bhattacharyya (ssb@umd.edu) by **Feb. 2nd** for more information.