Computer Science 1313: Programming for Nonmajors (C and a bit of Unix)  Fall 2012

Instructor  Syed Naveed Hussain Shah  shah8405@ou.edu
TAs  Faraz S. Maharloiy  faraz@ou.edu  Khondker S. Hasan  shajadul@ou.edu

Prerequisite or concurrent enrollment: Math 1523 - Precalculus and Trigonometry

Keep up to date on D2L (https://learn.ou.edu/)! Change happens!!!

Weekly Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
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<td>Khondker Help 10:30-12:00</td>
<td>Lecture 10:30-11:20</td>
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<td>11:59 PM</td>
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<td>Quizzes Due</td>
<td>Projects Due</td>
<td>Projects Late</td>
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Lecture Room  Dale Hall 0103
Lab Room  Carson Energy Center (CEC) 206
Help Room  Devon Energy Hall (DEH) 115

Semester Schedule

August 20  First day of lecture
August 31  Last day to drop without record
September 3  Labor Day Holiday
September 28  Last day to drop with automatic W (graduate students)
October 1  Midterm 1 (during lecture time)
October 26  Last day to drop with automatic W (undergrads)
November 12  Midterm 2
November 21-25  Spring vacation(Thanksgiving)
December 7  Last day of lecture
December 10  FINAL EXAM (8:00-10:00 AM, in lecture room)

Textbook
Programming in C (3rd Edition) by Stephen G. Kochan, ISBN 0672326663. The textbook is optional. However, please be advised that most online resources for learning C are terrible. The book provides extra detail and a different perspective from the instructor and TAs. If you learn well by reading books, this book is a pretty good option, and it's rather cheap as textbooks go, including an electronic version (at least in Kindle form). We also give you which sections to read for corresponding topics in the course. The book also contains additional programming exercises that you might find useful for practice.

Academic Misconduct
You will receive a zero for exams or weekly attendance on which you cheat, and appropriate admonitions or academic misconduct charges will be reported to the university. Helping someone else cheat is also cheating! See later sections for specific policies on exams and attendance.

On programming projects, you must indicate all individuals with which you worked and all sources from which you obtained specific ideas or content. (You should often be giving credit to the instructor and TAs for their help, for example.) You must also say what you used from someone else. Failure to give credit to others for their work is plagiarism. In this course, you will receive a -20% penalty on all assignments for which we detect copying for which you haven't given credit. We will use software tools for automatic detection of copied content at our discretion.

Egregious misconduct (throughout the semester, on the final exam, across multiple courses, …) may results in more serious consequences including expulsion from the university.

Academic misconduct charges and admonitions can be contested by students. See: http://integrity.ou.edu/summary_of_the_process.html

Student Responsibility
You are responsible for completing assignments on time, for keeping sufficient backup copies of your work, for applying yourself to understand the material, for attending lecture and lab, and for being present at exams. If you have personal circumstances that require adjustment, especially for cases of disability, let us know, and we will accommodate you as appropriate and according to university policy.

Finally, do not allow tutors or friends to “help” you so much that you do not understand the material. Exams weight heavily in this course for a reason.
Grades
Grades will be posted on D2L under the main lecture section (010). The breakdown is as follows:

<table>
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<th>Category</th>
<th>Percentage</th>
<th>Notes</th>
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<tr>
<td>Projects (8 total)</td>
<td>30% (3.75% each)</td>
<td>After the pre-midnight deadline, you lose credit at the rate at 1% per hour until the following midnight, at which point you lose credit at the rate of 1% per minute, until you reach 0 credit! That means it's all gone at 1:15 AM on Friday morning, for a project due on a Wednesday night. Also, any partially late hour or minute counts as the full hour or minute. For example, 12:00 AM Thursday morning counts as -1%, and 1:00 AM is -2%.</td>
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<td>Midterms (2 total)</td>
<td>30% (15% each)</td>
<td>Projects are submitted on D2L under the main lecture section. Each project description will be posted Thursday morning after the previous one is due. Projects are graded by the TAs. We will have a grading rubric and course-wide policies to standardize the grading somewhat. However, just like for essays, the grading of computer programs is somewhat subjective. Your individual grader will have some influence on the exact grade you get. Make sure to listen to him (Faraz or Khondker)! Khondker will run the 11:30 and 12:30 lab sections, and Faraz will run the 01:30 and 02:30 lab sections. For each project, after late credit is gone, Naveed will provide his own solution. When applicable, you can choose to base your next project on Naveed’s version (as always, giving proper credit). Attempts to use Naveed’s version (however obtained) for the current project will result in zero credit for that project and an admonition or academic misconduct report.</td>
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<tr>
<td>Final Exam</td>
<td>30%</td>
<td>Make sure to learn from your work on projects! Talk to other students about the issues, but don’t let them do too much for you. You want to be ready for exams (and real life, too). Also, to avoid a -20% penalty (as discussed earlier), you must list in your projects all others who helped you. Practice against plagiarism!</td>
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<td>Quizzes</td>
<td>5%</td>
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Letter grades are as common: ≥ 90% A, 80-89% B, 70-79% C, 60-69% D, < 60% F. This assumes grades are rounded down. That is, 89.99% is a B.

Projects
Programming projects are due usually every other week, on Wednesdays before midnight. Projects are submitted on D2L under the main lecture section. Each project description will be posted Thursday morning after the previous one is due. After the pre-midnight deadline, you lose credit at the rate at 1% per hour until the following midnight, at which point you lose credit at the rate of 1% per minute, until you reach 0 credit! That means it's all gone at 1:15 AM on Friday morning, for a project due on a Wednesday night. Also, any partially late hour or minute counts as the full hour or minute. For example, 12:00 AM Thursday morning counts as -1%, and 1:00 AM is -2%.

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Make sure to learn from your work on projects! Talk to other students about the issues, but don’t let them do too much for you. You want to be ready for exams (and real life, too). Also, to avoid a -20% penalty (as discussed earlier), you must list in your projects all others who helped you. Practice against plagiarism!

Midterm and Final Exams
Exams will be handwritten, including free form answers and programming exercises. The final exam will be comprehensive, as required by university policy. Plan to be present at the exams. Unless you have made previous arrangements, you will receive a 0% for a missed exam.

The exams are closed book, closed notes, and closed neighbor. You get a 0% on your exam for cheating. Cheating on the final exam may have even more serious consequences, as discussed earlier. Cheating on any exam, or helping another student to cheat, will be reported as an admonition or academic misconduct charge, as appropriate.
Quizzes

Quizzes are due every week or two, usually on Tuesdays before midnight. They are taken online on D2L under the lecture section (010). You can take each quiz as many times as you like, but your grade is for your final submission. You will not be able to see your quiz grade before the corresponding deadline.

You may work with other students on quizzes, but do not let them do your thinking for you. You are responsible for your own grade. This is also a good study opportunity.

Attendance

You should attend lecture and lab regularly. Don’t expect to skip out and still have a clue what’s going on. Lab attendance is also a great way to understand expectations for projects. Contact your grader if you have questions, preferably before a project is due. Visiting office/help hours is great.

To track attendance, we will have secret words provided in lecture and in lab. To indicate attendance, you must enter the correct words on special attendance “quizzes” on D2L, due each Tuesday. You must enter at least two correct words for full credit for the previous week. One word is worth half credit. We can also randomly sample in lecture to see if students are present. Claiming attendance for a date that you fail to respond in lecture will result in zero credit for that week. Providing attendance words to students who did not attend will have the same consequence. Violations will be reported first as an admonition and then as academic misconduct charges.

Topic List

Reading the given sections for each topic is recommended for improving your understanding and appreciation of the material. This might also have the side effect of improving your grade. You'll see material in your reading that we haven't covered in lecture. That's okay. It's good exercise. Oh, and on that topic, do the exercises at the ends of chapters as appropriate. It's good for you.

**Intro**

Chapters 1-4, 14 (pp. 327-331), 16 (pp. 347-359), 18 (pp. 395-409)

**Functions**

Chapters 8 (pp. 119-137, including “Top-Down Programming”, 152-164), 15

**Pointers**

Chapter 11 (pp. 235-240, 253-259, 272-277)

**Arrays & Strings**

Chapters 7, 8 (pp. 137-152), 10 (pp. 195-219, 227-233), 11 (pp. 259-268)

**Conditions**

Chapters 6, 5 (p. 46)

**Loops**

Chapters 5, 11 (pp. 268-271), 17 (p. 374)

**Memory Allocation**

Chapters 7 (pp. 115-117), 17 (pp. 383-388), 12 (pp. 279-280)

**Structures**

Chapters 9, 10 (pp. 219-227), 11 (pp. 240-252), 14 (pp. 321-327)

**Preprocessor**

Chapters 13, 18 (pp. 389-395)
Course Evaluations

“The College of Engineering utilizes student ratings as one of the bases for evaluating the teaching effectiveness of each of its faculty members. The results of these forms are important data used in the process of awarding tenure, making promotions, and giving salary increases. In addition, the faculty uses these forms to improve their own teaching effectiveness. The original request for the use of these forms came from students, and it is students who eventually benefit most from their use. Please take this task seriously and respond as honestly and precisely as possible, both to the machine-scored items and to the open-ended questions.”

Closing Thoughts

Programming is a blast! You get to make your own little world and see it do its thing. Programming also helps you sharpen your thinking skills. Vague thoughts don’t do the job. You have to learn to think through exactly what needs done to solve a task. Enjoy the drive.