



CS 2060

Programming with C

TR 3:05-4:20pm, ENGR 107



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ENGR 194

Office Hours: W 2-4pm

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**Course Description:** A first course in the C programming language for those who are proficient in some other high level language.

**Prerequisites:** CS 1120, CS 1150, GDD 1200, or ECE 1021; College of Engineering students only.

**Credit Hours:** 3

**Text:** *C: How to Program*, 8<sup>th</sup> Edition

**Authors:** Deitel and Deitel; **ISBN-13:** 978-0-13-397689-2

### **Course Objectives:**

At the completion of this course, students will be able to:

1. Write and compile programs in the C language
2. Understand structured programming (functions and loops)
3. Use the C standard library
4. Understand memory allocation and management (stack and heap)
5. Manage memory using pointers
6. Create and use arrays
7. Perform file I/O
8. Create and manipulate strings
9. Use bitwise operators
10. Implement simple data structures such as a linked list

Note: This syllabus may change during the course.

## Grade Distribution:

Category	Points Possible	Percentage of Grade
Quizzes	100	10%
Homeworks	300	30%
Midterm Exam	200	20%
Final Exam	400	40%
Total	1000	100%

## Letter Grade Distribution:

>= 93.00	A	73.00 - 76.99	C
90.00 - 92.99	A-	70.00 - 72.99	C-
87.00 - 89.99	B+	67.00 - 69.99	D+
83.00 - 86.99	B	63.00 - 66.99	D
80.00 - 82.99	B-	60.00 - 62.99	D-
77.00 - 79.99	C+	<= 59.99	F

## Course Policies:

- **General**

- Computers and phones are not to be used in class except for taking notes.
- Quizzes and exams are closed book, closed notes.

- **Labs and Assignments**

- Students are expected to work independently. **Offering** and **accepting** solutions from others is an act of **plagiarism**, which is a serious offense and **all involved parties will be penalized according to the Academic Honesty Policy**. Discussion amongst students is encouraged, but when in doubt, direct your questions to the professor, tutor, or lab assistant.

- **Attendance and Absences**

- Attendance is expected.
- Students are responsible for all missed work, regardless of the reason for absence. It is also the absentee's responsibility to get all missing notes or materials.
- Late homeworks will only be accepted with consent of the instructor given **prior** to the due date.
- Makeup quizzes will not be given.
- Makeup exams will only be arranged with consent of the instructor given **prior** to the exam day.

## University Policies:

Please read over the university policies on plagiarism, student code of conduct and discrimination / harassment. Plagiarism of code from the internet or from other student's is a serious issue and will be handled at my discretion. Please do your own work and don't copy. All submitted source code will be automatically checked for plagiarism.

- Plagiarism: [www.uccs.edu/las/current\\_students/las\\_plagiarism\\_policy.html](http://www.uccs.edu/las/current_students/las_plagiarism_policy.html)

- Student Code of Conduct and Behavior Policy:  
[www.uccs.edu/dos/student-conduct/student-code-of-conduct.html](http://www.uccs.edu/dos/student-conduct/student-code-of-conduct.html)
- Discrimination and Harassment: [www.uccs.edu/vcaf/policies/uccs-policies.html](http://www.uccs.edu/vcaf/policies/uccs-policies.html)

## **Support Services and Information**

*Disability Accommodations:* If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to register with Disability Services and provide them with documentation of your disability. They will work with you to determine what accommodations are appropriate for your situation. To avoid any delay, you should contact Disability Services as soon as possible. Please note that accommodations are not retroactive and disability accommodations cannot be provided until a Faculty Accommodation Letter has been given to me. Please contact Disability Services for more information at Main Hall room 105, 719-255-3354 or [dservice@uccs.edu](mailto:dservice@uccs.edu).

*Military Students:* If you are a military student with the potential of being called to military service or training during the course of the semester, you are encouraged to contact your UCCS course instructor no later than the first week of class to discuss the class attendance policy. Please see the Military Students web site ([www.uccs.edu/deploy](http://www.uccs.edu/deploy)) for more information.

### *Library Information:*

- Kramer Family Library: [www.uccs.edu/library](http://www.uccs.edu/library)
- Off-campus access to Library resources: [www.uccs.edu/library/help/offcampus.html](http://www.uccs.edu/library/help/offcampus.html)

*Academic for Centers Excellence:* The Academic Centers for Excellence (ACE) at UCCS include the Language Center, the Mathematics Center, the Communication Center, the Science Center, and the Writing Center – five academic centers designed to provide critical academic and individual support to all students in the University in all major academic areas, both within and beyond the classroom. [www.uccs.edu/academiccenters](http://www.uccs.edu/academiccenters) These particular centers may be helpful to you:

- Mathematics Center: [www.uccs.edu/mathcenter](http://www.uccs.edu/mathcenter) (includes Computer Science tutoring)
- Writing Center: [www.uccs.edu/writingcenter](http://www.uccs.edu/writingcenter)

### *Technology Support:*

- For Blackboard support, call 1-877-654-8309 or visit the Online Support Center
- For technology assistance related to logging into campus computers, determining your UCCS e-mail address or how to connect to the campus network from off-campus, visit the UCCS IT Help Desk web site at [www.uccs.edu/helpdesk](http://www.uccs.edu/helpdesk) or call 719-255-3536.

### Tentative Course Outline:

The weekly coverage might change as it depends on the progress of the class. However, you must keep up with the reading assignments.

Week	Content
Week 1	<ul style="list-style-type: none"><li>• Introduction to C Programming</li><li>• Reading assignment: Chapter 1 (optional), Chapter 2</li></ul>
Week 2	<ul style="list-style-type: none"><li>• Structured Program Development in C</li><li>• Reading assignment: Chapter 3</li></ul>
Week 3	<ul style="list-style-type: none"><li>• C Program Control</li><li>• Reading assignment: Chapter 4</li></ul>
Week 4	<ul style="list-style-type: none"><li>• C Functions</li><li>• Reading assignment: Chapter 5</li></ul>
Week 5	<ul style="list-style-type: none"><li>• C Arrays</li><li>• Reading assignment: Chapter 6</li></ul>
Week 6	<ul style="list-style-type: none"><li>• C Pointers I</li><li>• Reading assignment: Chapter 7</li></ul>
Week 7	<ul style="list-style-type: none"><li>• C Pointers II</li><li>• Reading assignment: Chapter 7</li></ul>
Week 8	<ul style="list-style-type: none"><li>• Review</li><li>• Midterm Exam</li></ul>
Week 9	<ul style="list-style-type: none"><li>• C Characters and Strings</li><li>• Reading assignment: Chapter 8</li></ul>
	Spring Break
Week 10	<ul style="list-style-type: none"><li>• C Structures, Unions, Bit Manipulation and Enumerations</li><li>• Reading assignment: Chapter 10</li></ul>
Week 11	<ul style="list-style-type: none"><li>• C Structures, Unions, Bit Manipulation and Enumerations II</li><li>• Reading assignment: Chapter 10</li></ul>
Week 12	<ul style="list-style-type: none"><li>• C File Processing</li><li>• Reading assignment: Chapter 11</li></ul>
Week 13	<ul style="list-style-type: none"><li>• C Data Structures: Linked List</li><li>• Reading assignment: Chapter 12</li></ul>
Week 14	<ul style="list-style-type: none"><li>• C Preprocessor and Other Topics in C: Command-line Arguments</li><li>• Reading assignment: Chapters 13 and 14</li></ul>
Week 15	<ul style="list-style-type: none"><li>• Review for final exam</li></ul>