CSE 220
Sec 1 - 2
Programming in C
Fall 2019

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http://www.cse.msu.edu/~cse220

Instructor: Dr. Juyang Weng
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Classes: This is a 3-credit course, having two types of classes: lectures and recitations.

Lectures: Mon. & Wed. 3:00 pm – 3:50 pm, 152 Natural Resource Bldg.

Recitations:
Sec 1: Fridays, 3:00pm - 4:50pm, 3353 Engineering Building
Sec 2: Fridays, 12:40pm - 2:30pm, 3353 Engineering Building

Course Description:
This course is an introduction to programming in C. Students with little or no programming background will learn the syntax and semantics of the C language. They will design, implement and test C programs. Students will learn general programming concepts and apply them to solve basic problems in engineering and mathematics.

Prerequisite: (EGR 100 or ECE 101) and ((MTH 132 or concurrently) or (MTH 152H or concurrently) or (LB 118 or concurrently)).

Course Topics:
Standard C data types, C control structures, Functions, Input and output, Arrays and Pointers, Structures, Compiling and linking

Textbook: ***C-Programming: A Modern Approach***, 2nd edition (K. N. King; 2008). ISBN-13: 978-0393979503, W.W. Norton & Company. Required for the course.

Examinations

Exams will be closed book and closed notes. Bring your MSU picture ID with you to all exams and quizzes to verify your name when you submit your exams.

Quizzes

Quizzes will be conducted in almost all lectures and recitations. They are questions that test whether you catch up the material discussed in the previous or the current lectures or recitations. You submit your quizzes in a single paper of letter size (to avoid being lost if the paper is smaller). Grading for quizzes: 2 for each single answer; 1 for each wrong answer; 0 for no submission.

No digital devices (e.g., calculators, music players, phones, translators) are allowed during quizzes or exams. You are required to show your MSU ID when you submit exams.

There will be ***no*** make-up exams.

Exam dates are scheduled on the syllabus. Midterm exam will cover all topics discussed through the previous week, inclusive. The final exam will cover all course topics.

Graded work will be weighted to count:

Recitation exercises (labs)	30%
Homework	20%
Midterm exam	20%
Quizzes	5%
Final exam	25%

Grading: Your final course score will be calculated based on the total score as follows:

4.0	90% or above
3.5	85% or above
3.0	80% or above
2.5	75% or above
2.0	70% or above
1.5	65% or above
1.0	60% or above, midterm exam at least 40% and final exam at least 60%
0.0	< 60%

We may decide to shift the score thresholds downwards if circumstances warrant doing so (e.g., score distribution) but not upwards.

Recitation

You are expected to attend every recitation. The instructor may lecture in some of the recitations to make up for a shortage of lecture classes to keep the class on schedule. Other recitations will be led by the teaching assistants. These will be devoted to interactive problem teaching and solving for your labs and homework assignments which

you submit through Google Classroom and is graded onsite and answering your questions about the assignments for the week. Recitation exercises cannot be made up.

Homework

Homework will be assigned and collected online through Google Classroom, and graded online. Some homework problems will be discussed during recitation, and you will have the opportunity to ask questions.

Collaboration and discussion on homework is encouraged in groups of up to four students. However, each student must write down his own work independently after the collaboration and discussion is over on each problem without looking at other's work. Copying other's work as your own is strictly prohibited, as it is plagiarism. It is important that you take advantage of peer collaborations to learn from and teach one another because exams will ***not*** be collaborative. You will need to demonstrate individual mastery of course concepts on exams.

No Late Work

No late work is acceptable. Do not forget to press the submission button on Google Classroom, but your loaded file is on record viewable by the graders regardless.

In case of documented schedule crisis (e.g., university team competitions or illness) provide, well in advance, formal and signed documents with contact information (absent dates, telephone number and email address) for verification well in advance. The approved corresponding due will be taken out from the total score. No consideration will be given for a petition about documented crisis that is submitted to the instructor *24 hours* or more after the work due time.

In case of illness, provide *as soon as* your first doctor visit, the doctor's official written notes in his business letter head that include your name, nature of the illness that justifies the absence and the duration, exact date/time of requested absence from school work, doctor's name and address, telephone number, email address, his signature and the date of signature. Incomplete notes will not be considered.

Piazza Discussion Forum

We will use Piazza.com as a discussion and notification forum for this class, as well as posting lecture note files. You will receive an invitation to join Piazza in the first week of class. The instructor and TAs will monitor Piazza and respond to questions posted to it; other students may also do so. If you have a question, you will often find that it has already been asked and answered on Piazza—so check. Important class notifications will be sent via Piazza. Be sure that you accept the invitation to join. If you do not receive an invitation to join in the first week of class, notify your TA. However, Piazza is not always effective for asking last-minute technical questions. See the instructor and TAs to interactively understand the questions and answers.

Honors Option

Suggestions about honor option are available from the instructor in an interactive way. The instructor may suggest some topics and you may do your own subject too. Talk to the instructor by the end of the 4th week of the course about your interest in taking the honors option and then send him an email to confirm by the end of the 5th week. Finish your plan (about a half page) for the honors option as a hardcopy and email by the end of the 7th week. Submit your honors option report before the final exam week as a hard copy and email, using the format for the authors of the Brain-Mind Magazine at brain-mind-magazine.org.

Academic Honesty

Michigan State University adheres to the policies on academic honesty as specified in General Student Regulations: 1.00 Protection of Scholarship and Grades and in the MSU Ordinance. These policies are included in *MSU Policies, Regulations and Ordinances Regarding Academic Honesty and Integrity*.
See https://www.msu.edu/~ombud/academic-integrity/.
Any student found guilty of academic dishonesty may receive a 0.0 for the course.

Drops and Adds

The last day to add this course is Wed. 9/4. The last day to drop this course with a 100% refund and no grade reported is Mon. 9/23. The last day to drop this course with no refund and no grade reported is Wed. 10/16. You should immediately make a copy of your amended schedule to verify you have added or dropped this course.

Campus Emergencies

If an emergency arises in the classroom, building or vicinity, your instructor will inform you of actions to follow to enhance your safety. As a student in this class, you are responsible for knowing the location of the nearest emergency evacuation route or shelter. These directions appear on the maps posted on the walls throughout this building. If police or university officials order us to evacuate the classroom or building, follow the posted emergency route in an orderly manner and assist those who might need help in reaching a barrier-free exit or shelter.

Enter the classroom with your phone in silent mode which receives emergency messages. If you observe or receive an emergency alert, immediately and calmly inform your instructor. (See also http://www.alert.msu.edu.)

Tentative Schedule of Topics

Week	Mon.	Wed.	Topic	Reading
1		8/28	Lecture L1: Introduction to Course	
	9/2		Holiday, no class	
		9/4	L2: Introduction to C	1
Reci.			Fri: Exercise and Homework	
2	9/9		L3: C Fundamentals (I)	2.1 - 2.4
		9/11	L4: C Fundamentals (II)	2.5 - 2.8

Reci.			Fri: Exercise and Homework	
3	9/16		L5: Formatted Input and Output	3
		9/18	L6: Expressions	4
Reci.			Fri: Exercise and Homework	
4	9/23		L7: Selection Statements (I)	5.1
		9/25	L8: Selection Statements (II)	5.2-5.3
Reci.			Fri: Exercise and Homework	
5	9/30		L9: Loops	6.1-6.5
		10/2	L10: Basic Types	7
Reci.			Fri: Exercise and Homework	
6	10/7		L11: Arrays (I)	8.1
		10/9	L12: Arrays (II)	8.2-8.3
Reci.			Fri: Exercise, HW & Review	
7	10/14		Midterm exam	
		10/16	L13: Functions (I)	9.1-9.3
Reci.			Fri: Exercise and Homework	
8	10/21		L14: Functions (II)	9.4-9.6
		10/23	L15: Program Organization (I)	10.1-2
Reci.			Fri: Exercise and Homework	
9	10/28		L16: Program Organization (II)	10.3-5
		10/30	L17 : Pointers (I)	11.1-2
Reci.			Fri: Exercise and Homework	
10	11/4		L18: Pointers (II)	11.3-5
		11/6	L19: Pointers and Array	12
Reci.			Fri: Exercise and Homework	
11	11/11		L20: Strings	13
		11/13	L21: Write Large Programs (I)	15.1-2
Reci.			Fri: Exercise and Homework	
12	11/18		L22: Write Large Programs (II)	15.3-4
		11/20	L23: Structures	16.1-3
Reci.			Fri: Exercise and Homework	
13	11/25		L24: Unions and Enumerations	16.4-5
		11/27	L25: File Input and Output	17.1-4
			MSU holiday	
14	12/2		L26: Pointers (III)	17.5-9
		12/4	L27: Review	
Reci.			Fri: Exercise and Homework	
Final exam: Monday, Dec. 9, 2019 3:00pm-5:00pm in the same lecture classroom				

The instructors reserve the right to modify the schedule, as necessary, during the semester. Students will be notified of all modifications in class and by updating the website.