

CS341 Syllabus - Spring 2021



- [Description](#)
- [Textbook](#)
- [Prerequisites](#)
- [Personnel](#)
 - [Instructor](#)
 - [Teaching Assistant](#)
- [Schedule](#)
- [Course Policies](#)
 - [Attendance](#)
 - [Quizzes](#)
 - [Frequency](#)
 - [Duration](#)
 - [Format](#)
 - [Cheating](#)
 - [Make-ups](#)
 - [Final Exam](#)
 - [Problem Sets](#)
 - [Labs](#)
 - [Final Grades](#)
 - [Penalty Points](#)
 - [Late Quizzes](#)
 - [Late Labs and Problem Sets](#)
 - [Incomplete Labs and Problem Sets](#)
 - [Bonus Points](#)
- [Other Classroom Rules](#)
- [Disability Support](#)
- [Academic Integrity](#)
- [Title IX](#)
- [Changes](#)

Description

This course is a survey of various levels of computer architecture and design: microprogramming and processor architecture, advanced assembly language programming, operating system concepts and input/output via the operating system.

Textbook

Required:

- “Computer Systems: A Programmer’s Perspective” Randal Bryant and David O’Hallaron. 3rd edition. Pearson 2016. *It has a student companion website.* The text is offered through the [inclusive access program](#) of UNM Bookstore in electronic form.

Prerequisites

Prerequisite courses:

- CS 241L
- ECE 238L

Prerequisite courses may be waived with instructor permission. Students who receive such a waiver will be responsible for knowing the material.

Personnel

Instructor

Tyler Morrow (✉ tmorro@unm.edu)

Teaching Assistant

Alyshia Bustos (✉ abustos2436@unm.edu)

Schedule

Zoom links for everything below can be found in Learn.

Lecture:

- Thursdays @ 17:30-20:00

Lab:

- Fridays @ 11:00-11:50

Office Hours:

- Fridays @ 09:00-11:00

Week	Thursday (lecture)	Friday (lab)
1: 01/19 - 01/22	Module 1 & Module 2	C Programming Overview
2: 01/25 - 01/29	Module 2	Data Lab (start)
3: 02/01 - 02/05	Module 2	Data Lab (continued)
4: 02/08 - 02/12	Module 3	Data Lab (finish)
5: 02/15 - 02/19	Module 3	GDB Overview
6: 02/22 - 02/26	Module 3	Bomb Lab (start)
7: 03/01 - 03/05	Module 3	Bomb Lab (continued)
8: 03/08 - 03/12	Module 4	Bomb Lab (continued)
03/15 - 03/19 Spring Break		
9: 03/22 - 03/26	Module 5	Bomb Lab (finish)
10: 03/29 - 04/02	Module 6	Cache Lab (start)
11: 04/05 - 04/09	Module 7	Cache Lab (continued)
12: 04/12 - 04/16	Module 8	Cache Lab (continued)
13: 04/19 - 04/23	Module 9	Cache Lab (finish)
14: 04/26 - 04/30	Module 9	TBD Lab (start)
15: 05/03 - 05/07	Module 10	TBD Lab (finish)
16: 05/10 - 05/14 (Finals week)	Final	

Course Policies

Attendance

- Lecture and lab attendance is required despite the fact that lectures will be recorded.
- Students may be up to 10 minutes late to lecture or lab without being considered absent.
- This course implements UNM's faculty handbook attendance policy which can be found [here](#). Students are encouraged to reconcile any perceived vagueness of this policy during lecture for the benefit of everyone.

Quizzes

Frequency

There will be a quiz at the start of every Thursday lecture (except for the first lecture).

Duration

The instructor will target an average of 1 minute per question. For taking quizzes remotely, additional time will be allotted to account for the overhead of writing answers electronically and submitting to Learn.

Format

Quizzes typically contain 5-10 short-answer questions.

The class contains a pool of Q questions where Q is at most 100 (the previous course stopped at 92 questions). Therefore, each question is technically worth $1/Q$ point(s).

An individual student's quiz contains some number of questions that they have not yet correctly answered. If a student answers a question incorrectly, it will appear on their next quiz. Upon answering a question correctly, that question will not be seen again.

Quizzes are to be taken with the assistance of a calculator - no notes, past quizzes, etc..

Cheating

Cheating during an exam will result in the loss of all points available from the questions on that exam, and being reported to the institution. Multiple offenses will result in being dropped from the course.

Make-ups

- Student may not take quizzes outside of a lecture, except in the case of make-up quizzes.
- Students may have an opportunity to take a make-up quiz if they have an acceptable and verifiable reason.
- The decision to permit a make-up quiz or approve an alternative quiz time is ultimately at the discretion of the instructor.
- **A request for a make-up quiz must be submitted via email to the instructor before the start of the lecture being missed.**
- Make-up quizzes will be conducted during the instructor's office hours.

Final Exam

- The final exam contains all remaining, unanswered quiz questions.
- Final exam participation is the prerogative of each student.
 - Whatever a student's final exam situation may be, taking it can not hurt their grade, only help it.
- The date/time of the final exam will be announced after mid-term.
 - The time for the exam will be based on 1 minute times the average number of questions remaining for all students in the class.
 - No resubmissions will be permitted on Learn.
 - Zoom meeting attendance with camera on and mic muted will be required.
- The final exam must be submitted to the corresponding posting on Learn.
 - The student may submit via email to the instructor if a technical difficulty arises. However, the student must submit to Learn once the technical difficulty is gone.
 - The answers from the email must match those posted to Learn, otherwise penalty points will be assessed as previously described.

Problem Sets

- The instructor will *strategically* assign problems from the textbook to prepare students for quizzes.
 - Module problem sets can found on this course website on module pages.

- Problems will typically be assigned/made available at the start of each module.
- The textbook contains two types of problems:
 - Practice problems:
 - Module problems are due before the start of the next module.
 - All answers are in the book.
 - Turned in via Learn.
 - Homework problems:
 - Module problems are due before the start of the next module.
 - Answers are NOT in the book.
 - Turned in via Learn.
- Problems will closely resemble quiz questions.
- Problems for final module will be due before start of final exam, and late/resubmissions will not be accepted.

Labs

- There will be numerous labs assigned throughout the semester.
- Labs will be posted via the course website and submitted to Learn.
- Labs must be inspected by the TA during “evaluation” labs, and then submitted via Learn before leaving the lab.

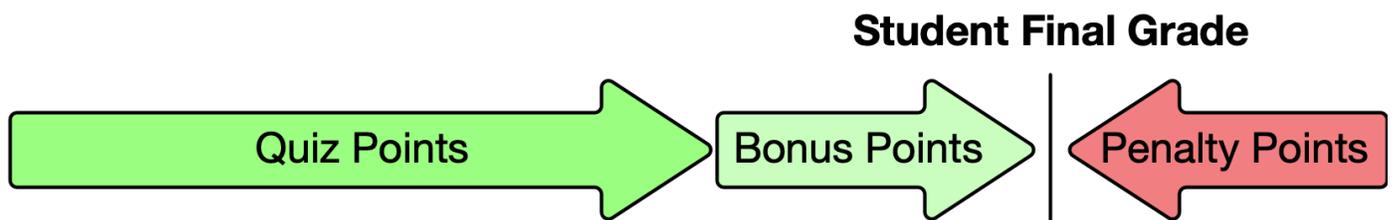
Final Grades

Final grades are calculated as follows:

$$\text{Final Grade} = \frac{q + b - p}{Q}$$

where:

- q is the student’s total quiz questions answered correctly
- b is the student’s total bonus points
- p is the student’s total penalty points



Letter grades are determined as follows:

Letter grade	Percentage	GPA
A+	97–100%	4.33 or 4.00
A	93–96%	4.00
A-	90–92%	3.67
B+	87–89%	3.33
B	83–86%	3.00
B-	80–82%	2.67
C+	77–79%	2.33
C	73–76%	2.00
C-	70–72%	1.67
D+	67–69%	1.33

Letter grade	Percentage	GPA
D	63–66%	1.00
D-	60–62%	0.67
F	0–59%	0.00

Penalty Points

Penalty points are obtained by:

- Submitting quizzes, labs, and problem sets late.
- Submitting incomplete labs or problem sets.

Late Quizzes

While the instructor has allotted extra time during the quizzes to allow for electronic submission, the instructor must still weigh the following when students report issues getting their quiz uploaded on time:

- The instructor can't verify the authenticity of reported computer troubles.
- The instructor recognizes that no matter how much you pay for it, Internet can still go out for long periods of time without notice.
- The instructor wants to be fair to all students.
- The instructor would rather give students the benefit of the doubt rather than distrust them by default.

With this in mind, the instructor will assess 0 to 3 penalty points based on the totality of the circumstances.

The following are contingency plans for students to follow:

- Scenario 1: Student's Internet is working but Learn is not responding.
 - Suggested Reaction: The student should attach the quiz PDF to an email and send it to the instructor from their UNM email before the submission deadline. After doing so, the student should continue to try and upload to Learn.
- Scenario 2: Power outage and/or Internet is not working, but student owns a smartphone
 - Suggested Reaction: The student should send an email to the instructor from their UNM email (using their phone's cellular data) before the submission that informs the instructor of the Internet outage. After doing so, the student should continue to try and upload to Learn.
- Scenario 3: Power outage and/or Internet is not working, but no smartphone.
 - First, send an email to the instructor within the first that this could be you within the first week of the course.
 - Suggested Reaction: Wait for power and/or Internet to return and upload.

Late Labs and Problem Sets

Penalty points for late lab and problem set submissions are calculated as follows:

$$\text{penalty points} = \text{days late} + 1$$

Up to a maximum of 8 (or 1 week).

Examples:

- Submitted right at deadline exactly: 1 penalty point
- 1 minute (0 days) after deadline: 1 penalty point
- 23 hours (0 days) after deadline: 1 penalty point
- 24 hours (1 day) after deadline: 2 penalty points
- 47 hours (1 day) after deadline: 2 penalty points
- 48 hours (2 days) after deadline: 3 penalty points
- ...
- 144 hours (6 days) after deadline: 7 penalty points
- 168 hours (7 days) after deadline: 8 penalty points
- 192 hours (8 days) after deadline: 8 penalty points

Incomplete Labs and Problem Sets

All labs and problem sets will have a specified threshold for “completion,” i.e., there will be minimum number of questions the student must answer correctly. Submissions which fall below the completion threshold will be considered late from the time feedback is received from the course personnel. Counting of days late will pause during periods of grading.

To maximize the probability of meeting the completion threshold, students should answer all questions to the best of their ability.

Bonus Points

Opportunities for bonus points are:

- Perfect attendance (2 bonus points)
- Completing all labs on time (2 bonus points)
- Extra work on labs (bonus points vary)
 - Due when lab is due
- Select book problems (bonus points vary)
 - Due when associated problem set is due

Other Classroom Rules

- Unwarranted noises: forbidden (keep microphone muted when not speaking)
- Interruption: no problem, just raise hand first (applies to classroom and Zoom)

Disability Support

If you have a documented disability and anticipate needing accommodations in this course, you are strongly encouraged to meet with the instructor as early as possible in the semester. You will need to request that the Accessibility Resource Center (<http://arc.unm.edu/>) staff send an email to the instructor verifying your disability and specifying what accommodation(s) you will need before the instructor can arrange your accommodation.

Academic Integrity

Every student enrolled in this course is expected to be familiar with the school’s policy on Academic Integrity <http://handbook.unm.edu/d100>.

Incidences of Academic Dishonesty will typically result in zero grades for the respective course components, notification to the university administration, and the student’s department chair, and further academic sanctions may be imposed as well in accordance with the regulations. Note that those who allow others to copy their work are just as guilty of plagiarism and will be treated in the same manner.

Unless specified otherwise, all work is to be completed **individually**. Students are free to ask questions of others and learn from friends, but they are not to copy answers and/or code. If there is any question or concern as to whether something would be considered cheating, students should contact the instructor prior to doing that thing.

Title IX

UNM is committed to the safety and well-being of all members of its community. US Federal Law Title IX states that no member of the university community shall, on the basis of sex, be excluded from participation in, or be denied benefits of, or be subjected to discrimination under any education program or activity. Furthermore, in accordance with Title IX guidelines from the US Office of Civil Rights, UNM requires that all faculty and staff members report any notice of sexual harassment, abuse, and/or violence (including personal relational abuse, relational/domestic violence, and stalking) disclosed through communication including but not limited to direct conversation, email, social media, classroom papers and homework exercises.

UNM’s Title IX Coordinator can be found here: <http://oeo.unm.edu/title-ix/index.html>.

Changes

The course may be modified as the semester progresses. The instructor will do his best to inform students of changes as early as possible.
