CS 211: Computer Architecture
Sections 01 – 04
Spring 2022

Course site https://rutgers.instructure.com/courses/160130

Lectures via Webex; schedule posted on Canvas

Recitation: TBA on Canvas

Instructor
David Menendez <davemm@cs.rutgers.edu>
Please put "[CS211]" in the subject line of your e-mail.
(Responses via e-mail should be with in two business days.)

Office hours
While remote: Webex https://rutgers.webex.com/meet/davemm
If on-campus instruction resumes: Hill 448

Tuesday & Thursday, 2:00 PM — 4:00 PM (ET)

Or by arrangement.

(Office hours are shared with 214, so be sure to mention that you are asking questions about 211.)

Course Forum
Link available through Canvas. Students are encouraged to answer each other's questions, but I will also check the forum daily for unanswered questions.

Technology Requirements
For remote lectures, students will need a device capable of joining a Webex meeting. Software is freely available from **webex.com**. (Past students have reported that Webex support for 64-bit Linux is questionable, so give yourself time to make alternative arrangements if necessary.)

Students will need access to a C compiler. We will be using GCC 9.3 as a reference compiler and the Instructional Lab (iLab) clusters as reference environments. **Programs submitted for assignments must compile and execute correctly in these environments.** Students will need appropriate remote-access software, such as SSH, X2Go, or Windows Remote Desktop. Installation instructions are be available through the department web site and will be linked from Canvas.

Please visit the Rutgers Student Tech Guide at **https://it.rutgers.edu/technology-guide/students/** for resources available to all students. If you do not have the appropriate technology for financial reasons, please e-mail the Dean of Students <**deanofstudents@echo.rutgers.edu**> for assistance. If you are facing other financial hardships, please visit the Office of Financial Aid at **https://financialaid.rutgers.edu/** .

Textbook

R.E.Bryant and D.R.O'Hallaron, *Computer Systems: A Programmer's Perspective*, Prentice Hall, third edition

(Second edition is also acceptable.)

Readings will be suggested from this book, but we will not be using it for assignments.

You may also find these books useful, but they are not required:

D.A.Patterson and J.L.Hennessy, *Computer Organization and Design: The Hardware/Software Interface*, Morgan Kauffman

Jens Gustedt, *Modern C*, Manning Publications
Available on-line at **http://freecomputerbooks.com/Modern-C-by-Jens-Gustedt.html**

B.W.Kernighan and D.M.Ritchie, *The C Programming Language*, Prentice Hall
The classic reference for C, but other resources can be found on-line. For example, **http://publications.gbdirect.co.uk/c_book/**

Course Structure
Students will be assessed using a combination of assignments, a midterm exam, and a final exam. Grades will be proportionally:
> 50% Assignments
> 25% Midterm Exam
> 25% Final Exam

In the event that we do not resume on-campus instruction, I *may* choose to switch from a single mid-term exam to several smaller on-line tests given throughout the semester.

Letter grades will not be given for individual assignments and tests. Final course grades will be determined according to overall scores. The mapping from course score to letter grade will be determined later in the semester, based on overall class performance. However, there are no expectations that some number of students must pass or fail; if everyone does well, everyone will get an A.

Assignments
We plan to have five major programming assignments during the semester. Four of these will involve writing C programs in a Unix-like environment. These assignments require a significant amount of time to complete, so students are advised to budget their time carefully.

Students will submit via the Assignments tool in Canvas. These assignments will not be collaborative: students must submit their own, original work.

Canvas will be the judge of when an assignment is submitted. Be aware that, like any web site, Canvas may become less responsive under load. Students are advised to submit several hours before the deadline, for safety. Submissions received after the deadline will be graded with a penalty of up to 50%. No submissions will be accepted more than six hours after the deadline.

For C programming assignments, students will be provided an auto-grading script that will test their programs using half of the test inputs that will be used for grading. Students are expected to test their code (and their source code archive) using this script prior to submission. Code that cannot be compiled or tested using the auto-grader will receive a significant penalty. Grading will be based solely on our ability to compile and execute your programs on the

reference iLab platform. **It is your responsibility to make sure your program works with the auto-grader on the iLab before submitting.**

Midterm Exam or Tests
If on-campus instruction resumes, the midterm exam will be given roughly half-way through the course, during lecture. The midterm will be announced at least two weeks in advance.

If on-campus instruction does not resume, tests may be administered via Canvas. These are intended to be completed in *at most* half the time of a lecture (40 minutes), and may be taken over a 24-hour period. Tests will be announced at least a week in advance and the lecture on the day of the test will be shortened appropriately.

Final Exam
If on-campus instruction resumes, the Final Exam will be given in person (room and time to be announced). Otherwise, the final exam will be administered via Canvas. Students may take the exam for up to three hours during 24-hour period. (Exams must be submitted before the end of the 24-hour period; be sure to start early enough to give yourself time to finish.)

Academic Integrity Policy
Summary: **http://nbacademicintegrity.rutgers.edu/home/academic-integrity-policy/**
Resources: **http://nbacademicintegrity.rutgers.edu/home/for-students/**
Students are expected to maintain the highest level of academic integrity. You should be familiar with the university policy on academic integrity. Violations will be reported and enforced according to this policy.

Use of external website resources such as Chegg.com or others to obtain solutions to homework assignments, quizzes, or exams is cheating and a violation of the University Academic Integrity policy. Cheating in the course may result in grade penalties, disciplinary sanctions or educational sanctions. Posting homework assignments, or exams, to external sites without the instructor's permission may be a violation of copyright and may constitute the facilitation of dishonesty, which may result in the same penalties as plain cheating.

Self-Reporting Absence Application:
Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website **https://sims.rutgers.edu/ssra/** to indicate the date and reason for your absence. An email is automatically sent to me.

Please note: If you have missed or will be unable to attend an exam, please contact me as soon as possible to see whether accommodations can be made.

Counseling, ADAP & Psychiatric Services (CAPS)
(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901
http://health.rutgers.edu/medical-counseling-services/counseling/
CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professionals within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community, and consultation and collaboration with campus partners.
Crisis Intervention
http://health.rutgers.edu/medical-counseling-services/counseling/crisis-intervention/

Report a Concern
http://health.rutgers.edu/do-something-to-help/

Violence Prevention & Victim Assistance (VPVA)
(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901
www.vpva.rutgers.edu
The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services
(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854
https://ods.rutgers.edu/
Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: **https://ods.rutgers.edu/students/documentation-guidelines**. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: **https://ods.rutgers.edu/students/registration-form**.