Syllabus
Saturday, August 20, 2022  9:11 PM

CS 3432 - Computer Organization

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Time</th>
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<tbody>
<tr>
<td>Dr Freudenthal</td>
<td>3pm mw</td>
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Finding syllabus online:
- Microsoft team: use code **3r7ernq**
- Open the class notebook, navigate to "Course Info" section, select "Arch1 Syllabus."
- Join iclicker class [https://join.iclicker.com/CQRH](https://join.iclicker.com/CQRH)

Teaching Team

Computer ORg Instructional team (corgi)

<table>
<thead>
<tr>
<th>Instructor</th>
<th>TA</th>
<th>IA</th>
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<tbody>
<tr>
<td><strong>Dr. Eric Freudenthal</strong></td>
<td><strong>Kevin Moreno</strong></td>
<td><strong>Jared De Los Reyes</strong></td>
<td><strong>J &quot;Blank&quot; Bruno</strong></td>
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<tr>
<td>Office hours</td>
<td>Immediately following lecture</td>
<td>TBA</td>
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<td>To schedule an appointment</td>
<td>Via calendly</td>
<td>TBA</td>
<td>TBA</td>
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<tr>
<td>To schedule weekly coaching meetings</td>
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Administrivia

- **Prerequisites**
  - Either
    - C or higher in Data Structures, Digital Design and Discrete structures/math
  - Or
    - B or higher in Elementary Data Structures, Digital Design and Discrete structures/math
  - Administration will eventually un-enroll students who don't satisfy prerequisite requirements
- **Students must enroll in both lab & lecture sections.**
  - Only one grade is assigned for the entire course

Attendance in lab & lecture

- **Some sessions may be remote**
  - Will be announced in the Teams' "general" channel.
  - Students can attend those sessions remotely or from the classroom.
- **Attendance at scheduled in-person sessions is mandatory.**
  - Some learning and assessment activities are in-person only (sorry)
  - Ok to miss no more than 3 sessions without permission.
- **Students can request permission to attend remotely for extended periods via teams from the**
instructor
  ○ Via teams channel

Mandatory Coaching sessions

• Purpose
  ○ Assist students in mastery of course competencies (work like a pump, not a filter)
  ○ Ensure that the teaching team is aware of individual and overall mastery of course competencies (used to adjust course to address students needs and determine grades at the end of the course)
  ○ Provide feedback regarding course standing (e.g. succeeding, falling a bit behind (in these particular competencies, or at risk of failing)

• Logistics
  ○ Each student will assigned a coach (an IA or TA)
  ○ Each student will be assigned a 20 minute weekly meeting (in person or on teams) with their personal coach at a mutually convenient time. If on teams, camera must be turned on.
  ○ Students must contact their coach to reschedule meetings when necessary, ideally at least 1 day prior.
  ○ A student who misses or is unprepared for five coaching sessions will be dropped from the course unless special arrangements have been made with the course instructor.

• How to prepare (before meeting)
  ○ Students should identify challenges.
    ▪ And mention them when the meeting starts.
    ▪ Ideally including relevant examples or references to text, project, etc.
  ○ Students should identify competencies they have mastered
    ▪ And mention them when a meeting starts..
    ▪ Ideally with relevant examples

• What to expect
  ○ Patient guidance and support.
  ○ Credit for competencies mastered.
  ○ Helpful guidance
  ○ Feedback on course standing

Texts

• The C Programming Language by Kernigham and Ritchie, any version
• Online resources
  ○ Computer org online text https://minersutep-my.sharepoint.com/:o:/g/personal/efreudenthal_utepe Edu/EunsiEef-25MgQgji1UYncoBOnwFvfSLkNby65HqaNRDGQ?e=4RYe2d
  ○ This semester Computer-org class notebook (for lectures)

Mandatory Coaching Sessions

• Students are required to attend a coaching session every week.
• The mechanism for scheduling coaching sessions will be discussed during class.

○ Respect, Professionalism
  • Intolerance/bigotry/sexism/ableism is unacceptable. All must respect other's significant choices and orientations.
  • To err is human. Forgiveness is divine.
  • It's really (better than) ok to admit confusion, or even that you 'spaced out' for a moment.

Grading

• Primarily: fraction of course learning outcomes observed in assessment instruments & during coaching sessions
Course-specific technical skills

- These are discussed explicitly in class
- Most are enumerated as "topics" in the computer-org notebook.

Non-course-specific skills

- MP: Mature programming; program structure & function of components should be easily discernable by other mature programmers (e.g. the instructional team). This primarily includes naming, modularity, use of whitespace, and comments.
- TM: Mature time management: e.g. meeting deadlines
- WC: Written communication.
- TL: Appropriate use of technical language and notation
- Prep: Preparedness for meetings: Primarily whether students are prepared to describe topics that they need to discuss at the beginning of a coaching session.

Non-negotiable Essential skills (mastery absolutely required)

- Ability to create, compile, and debug simple interrupt driven programs with source code in both C and assembly language using command-line tools.
- Analyze the role of a program counter and status register in the context of interrupts and sleep/wakeup.

Schedule:

- There will be 2 to three tests during the semester. Dates will be announced at least one week prior.
- Quizzes will be frequent and unannounced.

Lab projects

Intention:

- Lab projects are creative works intended to provide an opportunity for students to practice and explore the application of tools and concepts presented in class within the context of programming assignments.

Collaboration

- Collaboration and use of external resources on lab projects is highly encouraged.
- Students must clearly indicate any code incorporated within their solutions that they don't understand well enough to implement themselves.

Grading

- Skills associated with labs are assessed on quizzes and tests, and during coaching sessions (see coaching sessions).
- Lab correctness is not directly graded.

Schedule

- Labs will have announced progress benchmark schedules
- Meeting deadlines is a maturity skill observed in this course.
- Projects will have announced completion date(s).

Disabilities and Accommodations

- If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.
- Students are expected to conduct themselves in a professional and courteous manner, as prescribed by the Standards of Conduct: http://hoop.utep.edu/Student_Affairs_Chapter_One-HOP.htm

Academic Honesty

- By default, collaboration and use of 3rd party resources is not permitted when preparing solutions to problems posed during in-class tests, quizzes and 1-on-1 coaching sessions.
- Students are strongly encouraged to collaborate and utilize online resources when preparing
solutions to lab assignments. See section on lab projects (above) for details.

○ It is academic dishonestly for students to claim others' creative work as their own.

○ If academic dishonesty is suspected: The student conduct office will be contacted for adjudication. A temporary "incomplete" grade will be issued if their investigation extends beyond the grading period.