**Please sit with your team and introduce yourselves**

<table>
<thead>
<tr>
<th>CPSC 01</th>
<th>Aurora</th>
<th>E. Conrad, E. Mahintorabi, K. McCrohan, S. Rein</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSC 02</td>
<td>Inter.Codes</td>
<td>B. Carrion, T. Farthing, W. Miner, J. Wheadon</td>
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<tr>
<td>CPSC 03</td>
<td>Mind Palace</td>
<td>M. Baker, R. Brandt, K. Phillips, J. Prichard</td>
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<tr>
<td>CPSC 04</td>
<td>NN Face Recognition</td>
<td>B. Mackessy, E. Michaelson, B. Smith, S. Vargas</td>
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<tr>
<td>CPSC 05</td>
<td>SpareSpace</td>
<td>E. Arends, D. Hanany, G. Kunthara, D. Roche</td>
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<tr>
<td>CPSC 06</td>
<td>Tempo</td>
<td>R. Bermudez, R. Rozema, A. Susee</td>
</tr>
<tr>
<td>CPSC 07</td>
<td>3D Timeline App</td>
<td>W. Arrington, O. Patera, C. Riley, N. Wurthrich</td>
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<tr>
<td>CPSC 08</td>
<td>GU Campus AR Tour</td>
<td>D. Forrest, H. Hartwell, H. Schwartz</td>
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<tr>
<td>CPSC 09</td>
<td>ECDID</td>
<td>T. Jones, A. Murphy-Beach, M. Old, N. Vitha</td>
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<tr>
<td>CPSC 10</td>
<td>NIOSH I-Con Monitoring</td>
<td>K. Brandon, J. Loftus, B. Rieckers, E. Srock</td>
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</tbody>
</table>
Overview of the CS senior design program

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>CPSC 491</td>
<td>Software Engineering</td>
<td>This course! SE approaches &amp; tools Taught/graded by me</td>
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<td></td>
<td>(Tu/Th 3:15-4:30)</td>
<td></td>
</tr>
<tr>
<td>CPSC 491L</td>
<td>Senior Design Proj. Lab I</td>
<td>1 hour per week w/ advisor Graded by advisor</td>
</tr>
<tr>
<td></td>
<td>(TBD w/ Advisor)</td>
<td></td>
</tr>
<tr>
<td>CPSC 492L</td>
<td>Senior Design Proj. Lab II</td>
<td>Similar to 491L but in Spring</td>
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<td></td>
<td>(TBD w/ Advisor)</td>
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<tr>
<td>CPSC 499</td>
<td>Computers &amp; Society</td>
<td>SE ethics course Taught/graded by me</td>
</tr>
<tr>
<td></td>
<td>(W 3:10-4:25)</td>
<td></td>
</tr>
<tr>
<td>CEDE</td>
<td>Center for Eng. Design &amp; Entrepreneurship</td>
<td>Organizes senior design for all of engineering school</td>
</tr>
<tr>
<td></td>
<td>(Some W 4:10-6:10 slots)</td>
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</tbody>
</table>

* Note: Tomorrow at 4:30pm faculty advisor meeting (after 499) → come prepared to schedule weekly meeting!

High-level goals of senior design (for CS)

1. Learn software engineering **techniques and skills**
2. Apply them to a large **2-semester group project**
3. Build a professional, quality, useful/usable **software product**

* This is much harder than it sounds!
Project roles

Your team
○ 3-5 students
○ Handle all aspects of project ...
○ Development, scheduling, testing, deployment, and so on

Your sponsor
○ Person who initiated project
○ Will "own" finished product
○ Is an advocate for the project
○ 5 student-sponsored projects this year

End users
○ People that will use the product

Faculty advisor
○ Meets with your team weekly
○ Helps guide project / sounding board
○ Evaluates your work

DAB Member
○ Industry professional
○ Primarily evaluates project
○ An additional resource

Warnings

High expectations and time commitment
○ Not just a project class (project + class + CEDE)
○ Must build a high quality & complete product (graded on this)
○ Many students wish they knew this in advance (!!!)

Many different people to please
○ Software engineering instructor (i.e., me :-)
○ Faculty advisor (person that ultimately grades 491L/492L)
○ Project sponsor (largely determines project success)
○ DAB (evaluators)
○ Your team members
You can learn a lot in senior design

**What you can get out of this ...**

- Software engineering & project management skills
- Technical skills
- Experience working on a large/realistic project
- A “real” customer and user base
- How to work within a team
- Technical writing & presentation skills/experience
- Connections (DAB, sponsors, …)

**More warnings**

**How to succeed ...**

- Take it seriously (and from the start!)
- Listen carefully (to everyone)
- Plan on 8-12 hours outside of class per week
- Set aside 3+ hours per week to work together as a team
- Make steady progress
- Be a great team member
- Use your faculty advisor and DAB members
- Take time to understand what your sponsor wants/needs
- Take time to understand what your users want/need (!)
- Don’t shortchange quality (UI design, code design, testing, …)
Evaluation (also see the course syllabus)

CPSC 491 (Soft. Eng.)

○ 30% -- Three Exams
○ 15% -- Quizzes
○ 15% -- Classwork & Participation
○ 30% -- Homework Assignments
○ 10% -- Working Prototype

CPSC 491L & 492L (Proj. Lab)

○ 50% -- Technical Contributions … peer evals, code reviews, advisor
○ 15% -- Teamwork Contributions … peer evals, advisor
○ 15% -- Non-Technical Contributions … peer evals, advisor
○ 10% -- Participation … peer evals, attendance at meetings
○ 10% -- CEDE Deliverables … DAB & advisor assessment

Evaluation (also see the course syllabus)

Attendance

○ Required! … lots of group work, exercises, etc.
○ Over 4 absences may result in a V (F)
○ Attendance factored into your grade (for 491 and 491L/492L)

Academic Honesty

○ Looking at and sharing code, working together is critical!
○ Using libraries, frameworks, code also encouraged (w/ proper credit)
○ Adding a team member’s name to an assignment/report means you **certify** the person contributed
○ You must accurately/honestly evaluate each other
Quizzes

Most Tuesday’s we will have a quiz

○ Including next Tuesday

○ Quizzes will always be given at the beginning of class

You will be quizzed on ...

○ Content covered in class

○ Reading assignments

○ Homework assignments

Writing Expectations

491/L has significant technical writing components ...

○ Effective communication is important in software engineering
  ▪ Project planning (requirements, risks, …)
  ▪ Software/product design (architecture, UI, …)
  ▪ Project management (tasks, schedules, testing, …)
  ▪ Communicating status (teammates, advisors, sponsors, …)

○ Will be graded on writing skill as well as content