About CSE101

CSE 101
Yinong Chen

http://www.public.asu.edu/~ychen10/teaching/cse101/
Outline

- About the instructor
- Syllabus discussion
- Course objectives & outcomes
- Formats of lectures and labs
- Class and lab rules
- Policies
- Code of Student Conducts
ASU CSE since 2001,

- This semester:
  
  CSE101 (Mon and Wed Sections)
  ASU 101, CSE445/598 Distributed Software Development

- Before this semester at ASU

  ASU101 Fall 2008
  CSE 101: Every semester since Fall 2006
  CSE 225/EEE225: F02, S03, F03, S04
  CSE 240: F01, S02, F02, S03, F03, S03, SS04, F04, S05, F05, S06, S07
  CSE 310: SS01, F01, SS02
  CSE 330: S02, SS03
  CSE 420/598: S01
  CSE 423 (Capstone) S08, F09
  CSE 445/598: Almost every semester since Fall 2006
  CSE494/598: SS2010
Yinong Chen

Before joining ASU

- Lectured for six years
  Department of Computer Science
  Wits University of Johannesburg, South Africa
- Postdoc at LAAS-CNRS, Toulouse, France
- Ph.D. at University of Karlsruhe, Germany
- More …

http://www.public.asu.edu/~ychen10/

Heinrich Hertz worked at Univ. Karlsruhe from 1885 to 1888, where he discovered electromagnetic waves
Yinong Chen

- Books
- 120 research papers, 60 of which are after 2005 in service-oriented computing
- Editor of international journals
- Chair of international conferences
- Teach high school students to program robots
Course Outcomes

1. Demonstrate knowledge of engineering topics and careers
2. Design and implement computing and engineering projects, applying the engineering design process
3. Demonstrate elementary computer programming skills
4. Demonstrate project teaming and management skills
5. Apply software tools to the design process
6. Communicate technical material in oral and written forms
7. Have an understanding of the concepts of computing and engineering including engineering problem solving and modeling
Class Format

One hour of conventional lecture

Three hours of interactive lecture and laboratory

At least 4 hours after/before class study / week

Concepts, Principles, Methods, Theories
In-class exercises, Exams
Mandatory topics required by engineering program, such as engineering principles, architecture, design methodology, ethics, etc

Team work, Interaction
Hand-on, Programming, Experimentation
Lab assignment to complete
The latest technology that are useful and exciting, such as game programming, animation, e-business, robots, etc.

- Read the lecture slides before class
- Read the related book chapter/sections after the class
- Prepare for the lab before the lab session: There is a pre-lab-quiz to enforce the preparation
- Complete homework / project
Graded Activities

<table>
<thead>
<tr>
<th>Pre-Lab Quizzes</th>
<th>Weekly Pre-Lab Quiz (individual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratories</td>
<td>Weekly Lab Assignment (group activities)</td>
</tr>
</tbody>
</table>

Outside class meeting and lab time:
Meeting minutes, proposal writing, presentation, competition, final report

Will test knowledge learned
(1) In Laboratories
(2) Through the project
(3) In classroom
(4) Through reading

Exams of lecture and lab (individual)

In Class Exercises (group or individual)

Will test knowledge learned
(1) In the last lecture or in the current lecture
(2) Also serve as attendance record
What is a reasonable workload for a class?

Arizona Board of Regents Suggests:

- 2-3 hours outside of class for each credit hour!
- That means 4 to 6 hours of work outside of class in average.
- If you miss a class, you loose points, AND you will need spend more time to make up the contents;
- Some weeks you may spend more time, and other weeks you may spend less.
## Weight and Grading Scale

http://students.asu.edu/grades-grading-policies

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Pre-Lab Quizzes* (Individual, outside lab)</td>
<td>12%</td>
</tr>
<tr>
<td>In-Lab Assignments* (Group, in the lab)</td>
<td>40%</td>
</tr>
<tr>
<td>Design Project (Group, in &amp; outside lab)</td>
<td>16%</td>
</tr>
<tr>
<td>Exams (2) (Individual, in classroom)</td>
<td>12% each</td>
</tr>
<tr>
<td>In-Class Exercises* (Group or individual)</td>
<td>8%</td>
</tr>
</tbody>
</table>

* The lowest one will be dropped

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Symbol Grade</th>
<th>GPA Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>96-100%</td>
<td>A+</td>
<td>4.33</td>
</tr>
<tr>
<td>93-95%</td>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>90-92%</td>
<td>A-</td>
<td>3.67</td>
</tr>
<tr>
<td>86-89%</td>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>83-85%</td>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>80-82%</td>
<td>B-</td>
<td>2.67</td>
</tr>
<tr>
<td>76-79%</td>
<td>C+</td>
<td>2.33</td>
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<tr>
<td>70-75%</td>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>60-69%</td>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>Below 60%</td>
<td>E</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Lab Format

- A lecture and brief introduction with demo may be given by the instructor/TA at the beginning of the lab.
- Lab session starts exactly at 1:30 PM and is two hours and 50 minutes long.
- Your team could take two 10-minutes breaks, without asking for permission, except when the instructor or TA is giving a lecture.
- Grade will be deducted for late arrival: 10% deduction for every 15 minutes of lateness
You must read the corresponding lab manual (preparation part) before your lab session, which will be available before your lab session. You are expected to spend at least 2 hours of reading/preparation.

An on-line pre-lab quiz (10 multiple choice questions) will be given prior to your lab session to assess your preparation (reading the lab preparation part);

The lab quiz will be available three days before your lab session; once you have started the quiz, you have 20 minutes to complete; the quiz will be disabled at 1:30pm before your lab session starts.
Brief Demonstration of the Course
You will use different software packages and hardware kits in the lab

- Most software packages are also available for downloading to your own computers.
  - Alice
  - Visual Studio
  - Robotics Studio

- Lego NXT Robotics kits will be lent to each group later during the semester.
General Policies

- **Interaction:** You are encouraged to ask the instructor questions during the lectures and lab sessions.

- **Outside class help are welcome and encouraged:**
  - Discussion board (effective and fair);
  - Instructor’s and the TA’s office hours;
  - Email, phone call, and appointments if necessary.

- **A missing credit-activity will receive zero credit and may not be made up. The lowest scores of some activities (*) will be dropped.**

- **No extra credit-activities will be given to any individual. Extra credit-activities may be given to the entire class.**

- **Assignments:** Late submission will be accepted with grade deduction: 1% of grade deduction for every hour after the due time.
Extra credit, alternative, and inquires

- An alternative to a graded activity may be arranged if a student's absence is caused by documented illness or personal emergency. A written explanation (including supporting documentation) must be submitted to the instructor before the part of work is due or as soon as the circumstances are known.

- Any inquiries or appeals on grades of lab assignment, project, and tests must be done in writing by completing the "Grade Inquiry Form" within a week from the day the grades and/or comments were published on-line. State the problem and the rationale for any change in grade in your appeal.
Cooperation and Code of Conduct

- You are required to cooperate with your team member on the group assignments and projects.
- The contribution and possibly the weight of individual team members must be acknowledged/specified in the work handed in for grades.
- Anything you turn in must be your (or team’s) own work: You must write up your own solution with your own understanding. If you use an idea that is found in a book or other sources, or that was developed by someone outside your team, make sure you acknowledge the source and/or the names of the persons in the write-up for each problem.
- You are also encouraged to work with any member in the team or in the class to study for the tests and exams.
- The instructor and the TAs will CAREFULLY check any possible proliferation or plagiarism. We may also use the software tools like MOSS (Measure Of Software Similarity) to check any assignment that you submitted for grading. The university expects all students to adhere to ASU's policy on academic integrity. These policies can be found in the Code of Student Conduct:
  
  http://www.asu.edu/studentlife/judicial/integrity.html

- ALL cases of cheating or plagiarism will be handed to the Dean's office. Penalties include a failing grade in the class, a note on your official transcript that shows you were punished for cheating.
Announcement and Information

- Official announcements will be made either in the class, in the laboratory, or in the “Announcement” part of the course web page.
- Articles in the discussion board by the instructor, the TA, or other students are not official announcement.
- Make sure you regularly (at least once every two days) check the course web page for any announcements.
CSE 101
Team Building
Each lab is done in groups of three (or four if have to), which enforces the team work.

Each lab is divided into a number of exercises. In each exercise, one student will be the “driver” who operates the device (computer), while the other members will be the navigators who help the driver to get to the destination. The team must rotate the driver after each exercise. It is NOT acceptable that the members work in parallel on different exercises. Each student must learn the material in all exercises.

At the end of each exercise, the lab instructor will check and sign before the team can move to the next exercise.
“‘Ten’ Commandments” -- An Affective Code of Cooperation

1. Help each other be right, not wrong.
2. Look for ways to make new ideas work, not for reasons they won’t.
3. If in doubt, check it out! Don’t make negative assumptions about each other.
4. Help each other win, and take pride in each other’s victories.
5. Speak positively about each other and about your team at every opportunity.
6. Maintain a positive mental attitude no matter what the circumstances.
7. Act with initiative and courage, as if it all depends on you.
8. Do everything with enthusiasm; it is contagious.
9. Whatever you want; give it away.
10. Don’t lose faith.
11. Have fun!
Team Building Exercises

1. Team Building Exercise 1: All students stand in a circle and introduce yourself and others;
2. Team Building Exercise 2: Human Knot Icebreaker;
3. Team Building Exercise 3: Interview and find potential team members
4. Exercise 4: Explore the career opportunities in engineering
Team Building Exercise 1: Introduction

1. Students are partitioned into two groups, each group stands in a big circle
2. Students will introduce themselves by stating the following items:
   1) Your Name (First and Last Name)
   2) What is your major? (Undeclared can be a major)
   3) What are your strength, trait, experience, skill, expectation of your team members, …
3. Repeat the last three persons’ first name and major, and one strength mentioned
4. The purpose of this experiment is to help find your team members.
5. Partition into groups to proceed to the exercise 2
1. Students are partitioned into groups of 10 or less.
2. Each group standing, facing towards each other, in a circle.
3. Each person should be standing shoulder to shoulder.
4. Everyone lifts the left hand and reach across to take the hand of someone standing across the circle. No one should hold a hand with someone standing directly beside the person.
5. Next, have everyone lift their right and reach across to take the hand of another person standing across the circle.
6. Each group discusses how to untangle the knot (forming a circle of people with out a knot) without ever letting go of any hands.
7. Play
Team Building Exercise 3
Interview and Find Potential Team Members

- Each gets an interview form from the TA;
- Interview at least five students;
- Interview each other
- Fill out your own interview form during the interview
Team Forming

- Find teammates that could accommodate with your schedule.
- Go search around, don’t limit yourself to only your friends. Get to know people…
- If you do not send me your team, we will choose for you and you cannot complain!
Teams

- Form your teams
  - Each team should have 3 or 4 students
- When you have a team formed, fill out the information sheet, email to all members and submit it into the Lab 1 submission site
  - A team name.
  - Email addresses and phone numbers.
  - Time period available for teamwork outside the class