Course objectives:

- To become familiar with the mathematical modes of computers and formal language that will provide a foundation for understanding the limitations of computing.
- To provide the background needed by those students who decide to continue on to graduate studies in Computer Science.
- To develop skills in producing mathematical proofs about models of programming and formal languages.
- To understand the machine and language models associated with regular, context-free, and phrase-structure languages.
- To understand the issues of decidability, the Halting Problem, Church’s Thesis and computability.

Grading:

Grade will be comprised of quizzes, homework, Java programs and MidTerms.

- Quizzes /Homework 25%
- Programs 25%
- Midterms 50%

Quizzes:

There will be an online (canvas.weber.edu) quiz for each lecture/chapter due prior to start of class every day of lecture. It will cover the chapter/lecture material for that class session. The quizzes are open book and you will be allowed two times to take it. It is designed to encourage you to look at the material before class to give you an introduction to the material. Classroom lecture will cover the material and the assigned homework.

Homework:

Homework will be due at the beginning of class the following Monday. If Monday is a Holiday, (we get two this semester) homework will be due on the Wednesday of that week. If you can type your homework, that is preferred. However, the nature of the homework may not allow that. So, I must be able to read your homework. If I can’t read it, I won’t grade it. You will have the option of handing in your homework in class or uploading it in canvas. I much prefer you scan/upload it to canvas.

Programs:

There will be a programming assignment for each section, 3 total. Programs are to be done in Java. They will be due on the day of the midterm review so that you can concentrate on midterm study.

Midterms:

The text book has 3 major sections. There will be a non-comprehensive midterm over each section. There will not be a comprehensive final. The midterms will be given in the testing center in Student Services building on main campus. Midterms will be closed book and note.
Letter Grades:

- A : 94% <= Total
- A- : 90% <= Total < 94%
- B+ : 87% <= Total < 90%
- B : 84% <= Total < 87%
- B- : 80% <= Total < 84%
- C+: 77% <= Total < 80%
- C : 74% <= Total < 77%
- C- : 70% <= Total < 74%
- D+: 67% <= Total < 70%
- D : 64% <= Total < 67%
- D- : 60% <= Total < 64%
- F : Total <60%

Policies:
Quizzes and homework is open book, and can be done collaboratively. Do not allow your classmates to take advantage of you. Collaboration is mutually beneficial, and should increase everyone’s understanding of the material by working and discussing material and concepts with others. The online quizzes will be due by the time class starts on the day of that lecture. Monday and Wednesday homework assignments will be due the following Monday at the beginning of class. I will collect the homework and grade it to verify you have actually tried to do it. On the following Wednesday, we will review the homework in class and you will have the opportunity to correct your mistakes.

The material in this class is naturally cumulative. I will have midterms for each section. The 3rd midterm will not be a cumulative final. Midterms will be held in the Davis testing center, and I will give a free class period the week of the midterms.

Grade of ‘I’ will only be given in exceptional cases.

Please silence your phones and pagers before class starts.

Don’t cheat. Don’t find and blindly copy answers online, think for yourself and come up with your own solutions to homework problems. Online resources are to help you learn, not a replacement for your own work and thinking. Do not ask a classmate for homework or quiz answers. If you feel you are being taken advantage of in this area, please contact me. Collaboration is mutually beneficial, two-way learning. Cheating and copying is not.

CS Department cheating policy: CS Department policy dictates that any verifiable evidence of student academic cheating, as defined and determined by the instructor, will result in:

1) an automatic failing grade for the class and
2) a report to the Dean of Students that will include the student's name and a description of the student's dishonest conduct.

Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities in the Student Services Center, room SC 181.