This course is intended for students with little to no prior programming experience who:

1. are interested in seeking a major or minor in Computer Science, or
2. are other College of Engineering majors who wish to pursue the CS 101-102 path to meeting their computing requirement.

Other students are more than welcome to join CS 101 or may wish to check out the similar (but less intense) course of CS 100.

Learning Objectives:

1. Students will be able to read, understand, make functional alterations to, and create, through assembling very small code fragments, small programs (less than 50 lines) that achieve useful communication tasks.
2. Students will be able to design, implement, test, and debug (from scratch) a very small program that uses two standard control structures (e.g., conditional/if and iteration, or two iterations), which may be nested.
3. Students will appreciate what computer scientists do and the key concerns of that field that relate to students’ professional lives:
   - Students will recognize that all digital data is an encoding or representation, and that the encoding is itself a choice.
• Students will understand that all algorithms consist of manipulating data, iteration (looping), and making choices – at the lowest level, about numbers, but we can encode more meaningful data in terms of those numbers.

• Students will appreciate the value of a programming vs. direct-manipulation interface approach to computer use and will be able to describe situations where the former is preferable to the latter.

• Students will be able to identify the key components of computer hardware and how that relates to software speed (e.g., interpretation vs. compilation)

The lab assignments will be given out in lab and are due by 11:59 pm on Wednesday of the following week. Each lab assignment will count for 2% of the final grade. If more than 10 lab assignments are given, only the ten best assignments will be used for the determination of the final grade. Lab assignments submitted on the same day as the lab, will earn 5% extra credit. No late lab assignments will be allowed for this course. Lab scores will count for a maximum of 20% of the final grade.

Programming Projects can be turned in late with the following late penalties:

- One Day Late: 10% Penalty
- Two Days Late: 20% Penalty
- Three Days Late: 40% Penalty
- Four Days Late: 80% Penalty
- Five Days Late: 160% Penalty

All assignments (lab and programming) are to be turned in electronically.

If you have any questions regarding how any assignment or test is graded and you think that you deserve more points than you received, you must see the instructor about this within one week of the time the assignment is first returned to the class. No claims, justifiable or not, will be considered after this deadline.

Attendance at class is up to the discretion of each student; however, each student is responsible for all information (notes, hand-outs, announcements, etc.) covered during class. You should ask fellow classmates for missed information, not the instructor or the TA.

No "extra" work is allowed to make up for poor performance. Any student caught cheating will receive an E in the course, and face possible dismissal from the University. Students are advised that it is a violation to copy, or allow another to copy, all or part of an exam or program. No incompletes will be given for poor performance in the course.

Because of SPAM, when sending email please include "CS 101" in the subject.