Computer Science For Everyone

What Interests You?

The following courses are offered on a rotating basis:

**CSCI 1010, Intro to CS: Principles.**
A broad survey of the computer science discipline, focusing on the computer's role in representing, storing, manipulating, organizing, and communicating information. Topics include hardware, software, algorithms, operating systems, networks.

**CSCI 1020, Intro to CS: Bioinformatics.**
An introduction to computer programming motivated by the analysis of biological data sets and the modeling of biological systems. Computing concepts to include data representation, control structures, text processing, input and output. Applications to include the representation and analysis of protein and genetic sequences, and the use of available biological data sets.

**CSCI 1030, Intro to CS: Game Design.**
Introduces the design of computer and video games. Students learn the practical aspects of game implementation using computer game engines and 3D graphics tools, while simultaneously studying game concepts like history, genres, storylines, gameplay elements and challenges, and the design process.

**CSCI 1040, Intro to CS: Mobile Computing.**
An introduction to programming based on the development of apps for mobile devices such as phones and tablets. Students will learn to design an effective user interface, to interact with device hardware and sensors, to store data locally and access Internet resources.

**CSCI 1050, Intro to CS: Multimedia.**
An introduction to computer programming motivated by the creation and manipulation of images, animations, and audio. Traditional software development concepts, such as data representation and control flow, are introduced for the purpose of image processing, data visualization, and the synthesis and editing of audio.

**CSCI 1060, Intro to CS: Scientific Programming.**
Elementary computer programming concepts with an emphasis on problem solving and applications to scientific and engineering applications. Topics include data acquisition and analysis, simulation, and scientific visualization.

**CSCI 1070, Intro to CS: Taming Big Data.**
An introduction to data science and machine learning. Fundamentals of data representation and analysis will be covered, with a focus on real-world applications to business intelligence, natural language processing, and social network analysis.

**CSCI 1080, Intro to CS: Web Development.**
The technology of the web, from the structure of the Internet to the design of web pages. Students will learn Internet standard for encoding information, and create dynamic web pages using the latest technologies. The course introduces fundamentals of computer science, including programming concepts, software engineering principles, file systems, and database interactions.

For more information, see cs.slu.edu/undergrad-cs