

## **CSCI S-1. Elements of Computer Science Using Java (CRN: 31441)**

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Designed for students with little or no previous background in computing, this course introduces problem-solving methods and algorithm development using the high-level programming language Java. Students will learn how to design, code, debug, and document programs using techniques of good programming style in both mainframe and microcomputer environments. Related topics include the basic aspects of recursion, parameter passing, file I/O, classes and objects, arrays, and functional decomposition to enable top-down design. Certain applications will be chosen for their relevance to more advanced coursework in computer science, while others will involve nonscientific and business-related areas. Some attention will be given to the theoretical and practical limitations of automatic computation.