

## ***CS 1013: Computer Science Principles***

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**Required Course:** Not a required course and does not serve as a CS elective

**Course Number:** CS 1013

**Course Name:** Computer Science Principles

**Credit Hours:** 2

**Lecture Hours:** 3

**Lab Hours:** 0

**Instructors:** Dr.Sadiq Albuhamood

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**Book Title(s):** Introduction to computing and programming with Java a multimedia approach

**Book Author(s):** Mark Guzdial and Barbara Ericson.

**Book Year(s):**

**Book Title(s):** Introduction to Java Programming and Data Structures

**Book Author(s):** Y.Daniel Liang

**Book Year(s):**

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**Course Description:** Computing as a creative human activity, abstraction to reduce detail and focus on concepts relevant to understanding and solving problems, describing data and information to facilitate the creation of knowledge, discuss algorithms as tools for developing and expressing solutions to computational problems, use programming is a creative process that produces computational artifacts; and discuss digital devices, systems, and the networks that interconnect them.

**Course Prerequisites:** None

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**Course Goals:** By the end of this course, the student will have a comprehensive understanding of information technology. Students will be able to assess from different perspectives the role technology plays in society; learn the positive and negative effects of integrating digital technology to work, market, education, e-commerce, entertainment, and homes. Finally, understand the importance of the use of the World Wide Web to analyze and solve everyday problems.

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**Course Topics:**

- Trends in information processing
- Computer hardware
- Networks
- Ethical issues in computing