COURSE SYLLABUS

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YEAR COURSE OFFERED: 2019

SEMESTER COURSE OFFERED: FALL

DEPARTMENT: COMPUTER SCIENCE

COURSE NUMBER: COSC 1306

NAME OF COURSE: COMPUTER SCIENCE & PROGRAMMING

NAME OF INSTRUCTOR: JASPAL SUBHLOK AND SHISHIR SHAH

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The information contained in this class syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

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Course Description
Computer Science and Programming is an introduction to the art of solving problems using computer programming. Students will learn how to analyze computational problems, develop solutions to them as algorithms (or recipes) for a computer to follow, and implement the solution in a modern programming language.

Learning Objectives
Upon completion of this course, students will be able to:

• analyze problem description and map it to expected and/or given input information and output information to be computed
• associate information in a problem description to appropriate data types
• develop solution and write a program that entails the necessary computations to realize the expected output

Prerequisites
MATH 1310 or equivalent

Major Assignments/Exams
2 quizzes (15% each), final exam (20%), homework and programming assignments (30%), In-class assignments (20%)

Required Reading
COURSE SYLLABUS

How to Think Like a Computer Scientist, Learning with Python, Interactive Edition 2.

Recommended Reading


List of discussion/lecture topics

1. Intro to Computer Science and Computer Organization
2. Intro to problem solving methods: abstraction, modularity, testing, debugging
4. Example algorithms and applications