

## Eastfield College STEM Division

### COURSE SYLLABUS - Spring 2019

Mar 27 – May 16

#### COSC 1437

Section 43355 MW 9:30 – 12:20 am L311  
Programming Fundamentals II

Instructor: **David Kirk** Office: **L315** Phone: **972-860-7679**  
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### COURSE DESCRIPTION

Review of control structures and data types with emphasis on structured data types. Applies the object-oriented programming paradigm, focusing on the definition and use of classes along with the fundamentals of object-oriented design. Includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering. This course may use instructional examples and assignments from various programming languages, including but not limited to C, C++, C#, and/or Java. COSC 1437 or any higher level COSC course will meet the core curriculum and/or Associate in Arts or Associate in Sciences requirement. This course will fulfill DCCCD's degree requirements *only* if this course has been successfully completed and the date of completion does not exceed 10 years. (3 Lec., 3 Lab.)

### PREREQUISITES

Computer Science 1436 and college-level algebra or higher.

### TEXTBOOK AND MATERIALS

No textbook is required – will use free online materials. USB flash drive needed for saving programs. The free Java SDK will be used for compiling programs. For editing programs, TextPad will be used, but you may use an editor of your choice on your home computer or laptop.

### COURSE OUTLINE

All homework and the class schedule is located on the [Ecampus.dcccd.edu](http://Ecampus.dcccd.edu) class web site. Homework assignments are due by the date listed on the class website. Late assignments are accepted, but 5 points will be deducted for each day late. No late assignments will be accepted after **May 15, 2018**.

### EVALUATION PROCEDURES

Seven assignments	70%			
Two Exams	30%			
90 - 100 = A	80 - 89.9 = B	70 - 79.9 = C	60 - 69.9 = D	0 - 59.9 = F

## **CLASS CALENDAR**

(see [Ecampus.dcccd.edu](http://Ecampus.dcccd.edu) for updated calendar)

## **CORE CURRICULUM INTELLECTUAL COMPETENCIES**

- Reading: the ability to analyze and interpret a variety of printed materials – books, documents, and articles.
- Writing: the ability to produce clear, correct and coherent, and persuasive language appropriate to purpose, occasion, and audience.
- Speaking: ability to communicate orally in clear, coherent, and persuasive language appropriate to purpose, occasion, and audience.
- Listening: analyze and interpret various forms of spoken communication, possess sufficient literacy skills of writing, reading.
- Critical Thinking: think and analyze at a critical level.
- Computer Literacy: understand our technological society, use computer –based technology in communication, solving problems, acquiring information.

## **EDUCATIONAL OBJECTIVES**

1. Discuss computer and communication terminology.
2. Evaluate the effects and implications of computers and communication technology on society.
3. Demonstrate knowledge of the impact of technology on the individual's privacy, security, lifestyle, work environment, standard of living, and health.
4. Gather information for decision-making.
5. Participate in global communities using available technology
6. Create quantitative and qualitative data presentation.

## **STUDENT LEARNING OUTCOMES**

1. Demonstrate knowledge of objects and classes and how to design them
2. Demonstrate knowledge of computer science concepts and terminology
3. Demonstrate knowledge of parameters, use of arrays/vectors, and strings
4. Demonstrate knowledge of sorting and searching

### **Attendance Policy**

Students are expected to attend regularly all classes in which they are enrolled and to consult with the instructor when an absence occurs. If a student is unable to complete a course (or courses) in which he/she is registered, it is the responsibility of the student to withdraw; the instructor will assign a performance grade, which is based upon the performance of the student for the entire semester.

**Course Drop Date:** May 4, 2019

**Disclaimer:** The instructor has the right to change the syllabus during the semester. If this happens, students will be notified and the new syllabus will be posted.

**Institutional Policies:** <https://www.eastfieldcollege.edu/au/fastfacts/legal/pages/policies-for-syllabi.aspx>