<div align="center">

OAKLAND UNIVERSITY
SCHOOL OF ENGINEERING AND COMPUTER SCIENCE
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

</div>

INTRODUCTION TO C PROGRAMMING AND UNIX

<div align="center">

CSI 1420 (4 Credits); Section 15292; Winter 2018

</div>

INSTRUCTOR: Mohammad-Reza Siadat, PhD, (siadat@oakland.edu), EC 540

PREREQUISITES: MTH 154 (Calculus I) or equivalent

LECTURES: Mondays and Wednesdays, 10:00-11:47 AM, EC 566

REQUIRED TEXTBOOK: P. Deitel, H. Deitel, *C How to Program*, 8th Edition, Pearson, 2016, ISBN-10: 0-13-397689-0, ISBN-13: 978-0-13-397689-2.

RECOMMENDED TEXTBOOK: A. Afzal, *UNIX Unbounded – A Beginner Approach*, 5th Edition, Pearson - Prentice Hall, 2008, ISBN-10: 0-13-119449-6, ISBN-13: 978-0-13-119449-6.
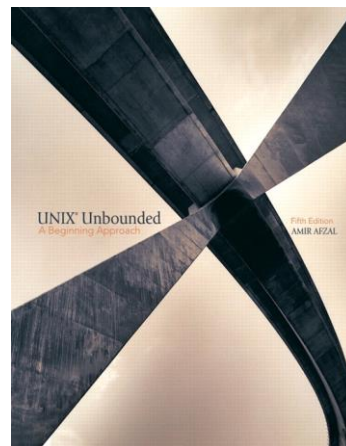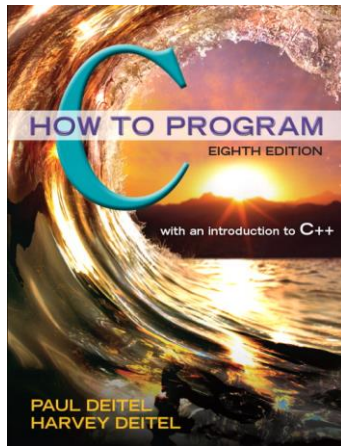
HOMEPAGE: A session-specific page is at https://moodle.oakland.edu/moodle. This website will include lecture notes and more. Please check this site often for updates.

COURSE DESCRIPTION: An introduction to programming and problem solving using C and Unix. The topics include fundamentals of C programming and basic Unix commands including file organization, user commands, and utilities in Unix and creating, editing, executing, and debugging C programs. Introduction to shell programming.

COURSE OBJECTIVES: By the end of this course the successful students will be able to:

1. Use Unix commands and utilities (a,c*)
2. Describe organization of Unix file systems (a,c)
3. Write C programs that contain expressions, flow control, functions, arrays and input/output (a,c,i)
4. Debug and run C programs under Unix (a,c,i)

*Program Outcomes

a) ==An ability to apply knowledge of computing and mathematics appropriate to the discipline;==
b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution;
c) ==An ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs;==
d) An ability to function effectively on teams to accomplish a common goal;
e) An understanding of professional, ethical, legal, security, and social issues and responsibilities;
f) An ability to communicate effectively with a range of audiences;
g) An ability to analyze the local and global impact of computing on individuals, organizations and society;
h) Recognition of the need for, and an ability to engage in, continuing professional development;
i) ==An ability to use current techniques, skills, and tools necessary for computing practice;==
j) An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices;
k) An ability to apply design and development principles in the construction of software systems of varying complexity.

COURSE PROCEDURES: Two sessions of in-person classes a week; No lab session; Homework assignments due the following week the same day by 5:30 PM unless otherwise mentioned; No late submission; Homework assignments should be performed on an individual basis; Pop up quizzes; One midterm exam and one final exam; Exams are closed book; No makeup exams are given unless there is a well-documented emergency.

GRADING:

- 5% Participation (not just attendance, rather participating in discussions)
- 10% Quizzes
- 25% Homework assignments
- 30% Midterm
- 30% Final Exam

IMPORTANT DATES (WINTER 2018):

Final exam: Monday April 23 from Noon to 3 PM in EC 566

For more important dates of Winter 2018 see:

https://oakland.edu/registrar/important-dates/

ACADEMIC CONDUCT POLICY: Students are expected to comply with the Academic Conduct Policy of the Oakland University. Any suspected cases of academic dishonesty will be forwarded directly to the Academic Conduct Committee. For more information on conduct regulations see
http://www.oakland.edu/?id=24228&sid=482