Introduction to Computer Science

The University of Toledo
Computer Science and Engineering Technology
CSET3600:901 55688

Instructor:	Dr. Jared Oluoch	**Course Website**:	Blackboard Learn
Email:	Jared.oluoch@utoledo.edu	**Class Location**:	DL
Office Hours:	Tuesdays 10:00 AM– 12:00 PM	**Class Day/Time**:	DL
Office Location:	NE 1613	**Lab Location**:	DL
Instructor Phone:	419.530.3272	**Lab Day/Time**:	DL
Offered:	Fall 2019	**Credit Hours**:	4

CATALOG/COURSE DESCRIPTION

This course teaches software engineering design principles. It covers both technical and non-technical aspects of software engineering. It assumes students have prior object-oriented programming background. As such, the course is geared towards applying the software design principles learned in prior coursework to design software.

COURSE OVERVIEW

Introduces the nature of software, the software process model, principles that guide the practice of software engineering, user interface design, web and mobile application design, and software testing and quality management.

STUDENT LEARNING OUTCOMES

Upon completion of the course, students will have the ability to perform the following:

- Define the nature of software
- Design Software process models
- Develop structured java programs
- Design User Interfaces
- Define framework activities
- Explain the waterfall software model
- Explain the incremental process model
- Utilize Agile software process model
- Understand the principles that guide software process models
- Understand software planning principles
- Understand software construction principles
- Deploy software
- Develop Use Case diagrams
- Test mobile and web applications
- Understand software guiding principles and attributes

TEACHING METHODOLOGY

Concepts will be explained through PowerPoint slides and videos. Students will complete hands-on assignments utilizing the computers in the lab or their own computers that reflect and reinforce the concepts covered in the lectures.

Recommendations for success:
- Start on assignments right away, programs usually take longer than expected
- Review your Java lectures from previous semester and reacquaint yourself with basic Java programming
- Read the information in the textbook, PowerPoint slides, and other materials
- Solve the examples from the textbook
- Ask questions

PREREQUISITES AND COREQUISITES
CSET1200

TEXTS AND ANCILLARY MATERIALS
Software Engineering: A Practitioner's Approach, eighth edition
Roger S. Pressman & Bruce R. Maxim
ISBN-13: 978-0-07-802212-8

TECHNOLOGY REQUIREMENTS
Recommended: A computer with Java JDK10.0.1 or higher installed

ACADEMIC POLICIES
Undergraduate Policies: http://www.utoledo.edu/policies/academic/undergraduate/

COURSE EXPECTATIONS
Please use your @Rockets.UToledo.edu email address for email communications.

OVERVIEW OF COURSE GRADE ASSIGNMENT
Grades are not negotiable and are dependent solely on the work submitted by the student on time.
90% and above: A, 80% but < 90%: B, 70% but < 80%: C, 60% but < 70%: D, < 60%: F

Grading
Quizzes = 15%, Homework Assignments = 20%, Project = 25%, Midterm = 20%, Final Exam = 20%

UNIVERSITY POLICIES

Policy Statement on Non-Discrimination on the Basis of Disability (ADA)

The University is an equal opportunity educational institution. Please read The University's Policy Statement on Nondiscrimination on the Basis of Disability Americans with Disability Act Compliance.
Students can find this policy along with other university policies listed by audience on the University Policy webpage (http://www.utoledo.edu/policies/audience.html/#students).

Academic Accommodations

The University of Toledo embraces the inclusion of students with disabilities. We are committed to ensuring equal opportunity and seamless access for full participation in all courses. For students who have an accommodations memo from Student Disability Services, I invite you to correspond with me as soon as possible so that we can communicate confidentially about implementing accommodations in this course. For students who have not established affiliation with Student Disability Services and are experiencing disability access barriers or are interested in a referral to healthcare resources for a potential disability or would like information regarding eligibility for academic accommodations, please contact the Student Disability Services Office (http://www.utoledo.edu/offices/student-disability-services/) by calling 419.530.4981 or sending an email to StudentDisability@utoledo.edu.

ACADEMIC AND SUPPORT SERVICES

Please follow this link to view a comprehensive list of Student Academic and Support Services (http://www.utoledo.edu/studentaffairs/departments.html) available to you as a student.

SAFETY AND HEALTH SERVICES FOR UT STUDENTS

Please use the following link to view a comprehensive list Campus Health and Safety Services available to you as a student.

COURSE SCHEDULE

WEEK	DATES	TOPIC	LEARNING OUTCOME(S)	ASSIGNMENTS DUE
1	8/26/2019	The Nature of Software	Define the nature of software	TBA
2	9/4/2019	Software Process Structure	Design Software Process Models	TBA
3	9/9/2019	Process Model	Design Software Process Models	TBA
4	9/16/2019	Agile Development	Utilize Agile Software Process Model	TBA
5	9/23/2019	Principles That Guide Practice	Understand Software Guiding Principles & Practice	TBA
6	9/30/2019	Understanding Requirements	Explain the Waterfall Software Model	TBA
7	10/7/2019	Requirements Modeling & Scenario Methods	Understand Software Construction Principles	TBA
8	10/14/2019	Class Based Methods	Design User Interfaces	TBA
9	10/21/2019	Behavior Patterns	Define framework activities	TBA
10	10/28/2019	Design Concepts	Explain the incremental process model	TBA
11	11/4/2019	Architecture Design	Understand software construction principles	TBA
12	11/11/2019	Component Level Design	Understand Software Guiding Principles & Attributes	TBA
13	11/18/2019	User Interface Design	Design User Interfaces	TBA
14	11/25/2019	Web & Mobile Design	Test Mobile & Web Applications	TBA
15	12/2/2019	Final Review	Review all course material	Final Project

The final exam will be held online in the final exams week.

The course schedule is subject to change, with notice.