Course Syllabus
CSET 3200 Client-Server Computing
The University of Toledo
Engineering Technology Department

Instructor: Scott Brahaney
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Office Hours: M/W 2:30pm-5pm
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Offered: Fall 2019
Class Location: On-Line
Class Day/Time: N/A
Credit Hours: 3

CATALOG/COURSE DESCRIPTION

An introduction to the software, concepts and methodologies necessary to design and implement enterprise wide client server systems. The costs and benefits of client server applications will be examined. Different client server architectures will be presented with emphasis on the way in which Web technology and the Internet can be used to implement client -server systems. Contents include distributed objects such as RMI, Corba, Java web services. Students will implement class projects, building distributed environment and client/server applications applying the principles and techniques presented in class.

COURSE OVERVIEW

Architectures Hardware/Software
Process Communication - Single Process, 2-Tier , N-Tier Architectures
Thick/Thin Client Programming
Delivery Systems - Browsers, Software Distribution issues
Application/DBMS Servers
Error Handling/Recovery
Testing Techniques
Basic GUI's
Xml Processing
Thin Client Programming
Web Server as Application Server
Html
Using Databases
N-Tier Programs
Browser Side Technologies
Javascript
Netbeans and JDK
Middleware
Web Services

STUDENT LEARNING OUTCOMES

Related Program Outcomes (c, b, f and g):

Upon successful completion of the course, students will:

1. Understand fundamental concepts of Web Services including: Client Server systems, system models of distributed systems, networks that distributed systems run on, communication protocols between processes in distributed systems, Middleware, Enterprise Application integration, and Web Services Security
2. Compile and execute actual programs using sockets, Java RMI, Java Beans, and Web Services. Explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course: a,c,b, f, g,

    c. An ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs.

    b. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.

    f. An ability to communicate effectively with a range of audiences using a range of modalities including written, oral and graphical.

    g. An ability to analyze the local and global impact of computing on individuals, organizations, and society.

Course Objectives

After successful completion of this course, students will be able to:

- understand fundamental concepts of Web Services including
  - Client Server systems
  - System models of distributed systems
  - Networks in-which distributed systems run on
  - Communication protocols between processes in distributed systems
  - Middleware
  - Enterprise Application integration
  - Web Services Security
- Compile and execute actual programs using sockets, Java RMI, Java Beans, and Web

ACADEMIC POLICIES

Each student is expected to complete their own assignments. **Students are strongly encouraged to discuss assignments and solutions, and to assist each other. However, the assignments and tests must be completed independently.**

Academic dishonesty will not be tolerated. Any Test or assignment determined to be dishonest (Examples; Plagiarism, Giving or receiving answers to an exam or assignment before it's due date/time – see Policy Number 3364-71-04 for more detail) may result in (a) Student receiving an F for the work in question. (b) Student Receiving an F for the course.

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

Graduate Policies: http://www.utoledo.edu/policies/academic/graduate/

COURSE EXPECTATIONS

Any assignment due date extensions must be requested prior to the original due date of the assignment.
Email is the preferred form of correspondence.
You are always welcome to stop by my office during scheduled office hours or preschedule a non-office hour meeting.

OVERVIEW OF COURSE GRADE ASSIGNMENT

HOMEWORK:

All Class material will be posted on Blackboard in the Start-Here Tab.

It is not necessary to purchase the book.

Class Reading Material:

Each Week new material will be added to the "Reading Material" Section under the Start-Here tab on Blackboard.

All homework assignments will be turned in via Blackboard.

Each week on Monday a homework assignment will be posted with a due date of the following Friday midnight.

The assignments are worth a total possible 10 points, will be graded on Saturday and Sunday. Once graded you will have until midnight Monday to make corrections for an updated grade.

EXAMs:

Notification of Exams date/time/location will be given at least 2 weeks' prior (midterm and final). You are expected to take the exam on campus, there are no exceptions.

NOTE: You must have student ID with you to take the exams.

Midterm Paper:

Information about the Midterm Paper will be posted to Blackboard on week 3.

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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).

GRADE COMPOSITION:

Midterm Examination (week 6 or 7) On-Campus
Final Examination (week 14 or 15) On-Campus

Grading:

Midterm Exam	30%
Final Exam	30%
Midterm Report	10%
Homework	10%
Final Project	20%

Scale:

93-100%	A	73-76%	C
90-92%	A-	70-72%	C-
87-89 %	B+	67-69%	D+
83-86%	B	63-66%	D
80-82%	B-	60-62%	D-
77-79%	C+	0-59	F

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

Each week's homework assignment is due before midnight Friday.

WEEK	DATES	TOPIC	LEARNING OUTCOME(S)	ASSIGNMENTS DUE
1		Basics – Visual Studio install		
2		Structured Programming Compiler/Interpreter Von Nuemann Model		
3		Software Architectures Synchronous/Asynchronous Midterm Paper Information		
4		Client Server Ports/Socket		
5		HTTP/HTML		
6		CSS/HTML5		
7		Midterm/Final Project Information		
8		JavaScripts HTML Forms HTML Tags		
9		Exception Handling		
10		Data Types Cookies Condition Statements Loops		
11		OOP		
12		XML		
13		Thin Client		
14		WEB Services XML-RPC SOAP WDSL UDDI		
15				