

## Based on ABET CAC Student Learning Outcomes

**1. Course Number and Name:**

CSET 3200 Client-Server Computing

**2. Credits and Contact hours:**

Credits: 3 hours, Contact: 3 lecture hours

**3. Instructor's or course coordinator's name:**

Jared Oluoch

**4. Text book, title, author, and year:**

None

**a. Other supplemental materials:**

Web Services by Gustavo Alonso and course web site

**5. Specific Course Information:**

**a. Brief description of the content of the course (catalog description):**

This course will cover various distributed system topics from fundamental concepts and principles to some advanced topics. Majority of the class will be devoted to middleware and enabling technology. Contents include distributed objects such as RMI, Corba, Java web services. Theory will be applied to implement class projects in building distributed environment and client/server applications. At the end of the class, student should be able to gain solid knowledge on distributed systems concepts and be able to apply them to simple real world projects.

**b. Pre-requisites, or co-requisites:**

None

**6. Specific goals for the course:**

**a. Specific outcomes of instruction:**

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.

**b. Explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course: 3, 4, 5**

3. An ability to communicate effectively in a variety of professional contexts
4. An ability to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. An ability to function effectively as a member or leader of a team engaged in activities.

**Brief list of topics to be covered:**

1. Client Server Architecture
2. Process Communication
3. XML
4. Netbeans and JDK
5. Middleware
6. Enterprise Application integration
7. Basic Web Technologies
8. Web Services.