

ABET Course Syllabi

1. *Course number and name*

COSC 4360 Net-Centric Computing

2. *Credits and contact hours*

3 Credit Hours

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

Instructor: Leonard Brown

4. *Textbook, title, author, and year*

Computer Networking – A Top-Down Approach Featuring the Internet, Kurose and Ross, Prentice-Hall, 2013.

5. *Specific course information*

a. *A brief description of the content of the course (catalog description)*

Introduces the structure, implementation, and theoretical underpinnings of computer networking and the applications that have been enabled by that technology.

b. *Prerequisites or co-requisites*

COSC 2336

c. *Indicate whether a required, elective, or selected elective course in the program*

Required course for Computer Science

6. *Specific goals of the course*

a. *Specific outcomes of instruction, ex. The student will be able to explain the significance of current research about a particular topic.*

1. Understand the principles of data communications and network
2. Analyze different networking options
3. Design a networked system given the requirements
4. Compare different networking technologies
5. Apply security principles to secure data in transit

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

Course address ABET Student Outcome(s): a, b, c, e:5, h:2&5,i:4, j

7. *Brief list of topics to be covered*

- Introduction to net-centric computing
- Communication and networking
- Network security
- The web as an example of client-server computing
- Compression and decompression
- Wireless and mobile computing