COURSE DESCRIPTION

<table>
<thead>
<tr>
<th>Course No. Course Type</th>
<th>Course Title</th>
<th>Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 568 Sel. Elect.</td>
<td>Principles of Wireless Networks</td>
<td>Jing Deng</td>
</tr>
<tr>
<td>Sem. Hours</td>
<td>3</td>
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</tbody>
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Current Catalog Description:
Digital communications, Communication networks, wireless communication technology, wireless networking, wireless sensor networks, Wireless LANs, and wireless network programming.

Textbook:

References:

Course Outcomes:
Upon successful completion of this course, a student should be able to:
1. Describe and compare the basic technologies used in communications systems for wireless networks (CO1)
2. Describe the organization of wireless networks and evaluate alternative organizations (CO2)
3. Analyze the protocols used in wireless LAN technologies (CO3)
4. Communicate technical information in written and oral reports (CO4)

Prerequisites by Topic:
Students must have
- grades of at least C (2.0) in CSC 330 (Advanced Data Structures), and
- CSC 567 (Principles of Computer Networks), or
- permission of instructor
Major Topics Covered in the Course:

- Transmission fundamentals.
- Communication Networks.
- Protocols and the TCP/IP suite.
- Antennas and propagation.
- Signal encoding techniques.
- Spread spectrum communication.
- Coding and Error Control.
- Mobile IP and wireless access protocol.
- Wireless LAN technology.

Estimated Curriculum Category Content (Semester hours):

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<thead>
<tr>
<th>Area</th>
<th>Core</th>
<th>Advanced</th>
<th>Area</th>
<th>Core</th>
<th>Advanced</th>
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<tbody>
<tr>
<td>Algorithms</td>
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<td>Software design</td>
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<tr>
<td>Data structures</td>
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<td>0</td>
<td>Prog. Languages</td>
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<tr>
<td>Comp Org &amp; Arch</td>
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<td>0</td>
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