

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

**ACADEMIC AFFAIRS**

Course Number: TCOM-360 Department: Telecommunications Tech

Course Title: Wireless Communications Semester: Spring Year: 2010

**Objectives/Competencies**

| <b>Course Objective</b>  | <b>Competencies</b>   |
|--|---|
| 1. To become familiar with the history and evolution of wireless communications    | 1. To be able to describe how wireless communications has evolved                                 |
| 2. To become familiar with the components of a wireless telecommunications network | 1. To be able to explain the operation of the components of a wireless telecommunications network |
| 3. To become familiar with the cellular concept                                    | 1. To be able to explain the cellular concept and what its advantages are                         |
| 4. To become familiar with the GSM & CDMA cellular systems                         | 1. To be able to describe the difference between the GSM and CDMA cellular systems                |
| 5. To become familiar with IEEE 802.11 Wireless LAN technology                     | 1. To be able to explain the operation, setup, and limitations of IEEE 802.11 wireless technology |

| <b>Course Objective</b>  | <b>Competencies</b>   |
|--|---|
| 6. To become familiar with IEEE 802.15 Wireless PAN technology | 1. To be able to explain the operation, setup, and limitations of IEEE 802.15 wireless technology |
| 7. To become familiar with IEEE 802.16 Wireless MAN technology | 1. To be able to explain the operation, setup, and limitations of IEEE 802.16 wireless technology |
| 8. To become familiar with IEEE 802.20 Wireless RAN technology | 1. To be able to explain the operation, setup, and limitations of IEEE 802.20 wireless technology |
| 9. To become familiar with wireless satellite communications   | 1. To be familiar with the operation of satellite communications systems                          |