



**BAKER COLLEGE**  
**STUDENT LEARNING OUTCOMES**

**CSC 2110 Cisco CCNA Networking I**

**3 Semester Hours**

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**Student Learning Outcomes & Enabling Objectives**

1. Describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network.
    - a. Select network devices based on feature compatibility and network requirements in a scalable hierarchical network.
    - b. Configure enhanced inter-switch connectivity technologies. (VLAN, DTP)
    - c. Explain how different varieties of spanning tree protocols operate and apply them to switched networks.
    - d. Explain link aggregation operation in a switched LAN environment. (HSRP)
    - e. Explain the features and characteristics of dynamic routing protocols comparing link state to distance vector protocols.
    - f. Explain the features and characteristics of EIGRP and implementing in a small to medium size network.
    - g. Configure and trouble shoot EIGRP to improve network performance.
    - h. Explain how single-area v3 and v3 OSPF routing protocol operates.
    - i. Explain how multi-area OSPF operates in a small to medium-sized business network.
    - j. Configure and troubleshoot OSPF to improve network performance.
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These SLOs are not approved for experiential credit.

**Effective: Fall 2017**