Course Rationale:

The course introduces the architecture, structure, functions, components and models of the Internet and other computer networks. It uses the OSI and TCP/IP layered models to examine the roles of protocols and services. This includes the principles and structure of IP addressing, LAN and WAN specifications, and network management which provide a foundation for the course. Hands on and simulation based activities in this course assist with the configuration, operation, and troubleshooting of routers and switches in a small to medium sized internetwork. This course helps the student prepare for the Cisco Certified Entry Network Technician certification exam.

Course Objectives:

Upon successful completion of this course, the student's acquired competencies include:
- Describe the operation of data networks
- Implement a small switched network
- Implement an IP addressing scheme and IP services to meet network requirements for a small branch office
- Implement a small routed network
- Explain and select the appropriate administrative tasks required for a WLAN
- Identify security threats to a network and describe general methods to mitigate those threats
- Implement and verify WAN links

Attendance:

See the STA Student Handbook. In summary, students are expected to be present and punctual for all scheduled classes and labs. Please notify your instructor of any absence or attendance concern prior to the absence, if possible.

Curriculum Access:

Students will utilize course materials through our curriculum providers, TestOut (**www.testout.c**om) Network Pro and Cisco Networking Academy (**www.netacad.com**) CCNA R&S: Introduction to Networks and CCNA R&S: Routing and Switching Essentials. Each student will utilize his or her personal username and password combination to the curriculum providers' websites. Students should remember not to share their curricular access or they will be in violation of the respectable user agreement and may lose access to the course materials.

Code of Conduct:

Students are expected to conduct themselves in a manner consistent with the educational purpose of this institution. Conduct deemed unacceptable toward maintaining a proper educational atmosphere will subject the student to disciplinary action in accordance with STA and LSR-7 policies.

Dual Credit Opportunity:

Qualified students can enroll and earn dual-credit through MCC-Business&Technology: **CSIS112**: Introduction to Networks; **CSIS113**: Routing & Switching Essentials or through the University of Central Missouri: **NET1060**: Introduction to Networks; **NET1061**: Routing & Switching Essentials.

Grading Scale:

95	-	100	A	73 - 76	C
90	-	94	A-	70 - 72	C-
87	-	89	B+	67 - 69	D+
83	-	86	B	63 - 66	D
80	-	82	B-	60 - 62	D+
77	-	79	C+	Below 60	F

Grading Rationale:

In this course, the semester grade will consist of the student's evaluated performance. The student's semester grade is calculated by combining the 18-week grade and the required Lee's Summit R-7 semester final exam as follows:

SEMESTER GRADE COMPONENTS	SEMESTER %
● Daily Work (see explanation below)	40%
● CCNA R&S: Introduction to Networks Skills Exam	20%
● CCNA R&S: Routing & Switching Skills Exam	20%
Lee's Summit R-7 Semester Final	**20%**
TOTAL SEMESTER GRADE PERCENTAGE	**100%**

Daily Work:

Credit for daily work will consist of a combination of all in-class, out-of-class, and homework assignments not indicated above. These assignments include, but are not limited to the following: quizzes, simulations, packet tracer exercises, and writing assignments.

Late Assignments:

Assignments that are late due to an Excused Absence must be submitted in accordance with the LSR-7 policy. Any assignment submitted one school day late will be reduced by 25%, two days 50%. Any assignments received 3 or more days late will be awarded no credit.