

Curriculum Committee – Approved: September 2023 CSCI 2233 – CISCO Introduction to Networks Page 1 of 4

- 1. COURSE TITLE*: CISCO Introduction to Networks
- 2. CATALOG PREFIX/COURSE NUMBER/COURSE SECTION*: CSCI 2233
- **3. PREREQUISITE(S)*:**

COREQUISITE(S)*:

- 4. COURSE TIME/LOCATION/MODALITY: (*Course Syllabus Individual Instructor Specific*)
- 5. CREDIT HOURS*: 3.0 LABORATORY HOURS*: (contact hours)

LECTURE HOURS*: 3.0 OBSERVATION HOURS*:

- 6. FACULTY CONTACT INFORMATION: <u>(Course Syllabus Individual Instructor</u> <u>Specific)</u>
- 7. COURSE DESCRIPTION*: This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

8. LEARNING OUTCOMES*:

- 1. Understand and describe the devices and services used to support communications in data networks and the Internet
- 2. Understand and describe the role of protocol layers in data networks
- 3. Understand and describe the importance of addressing and naming schemes at various layers of data networks in IPv4 and IPv6 environments
- 4. Design, calculate, and apply subnet masks and addresses to fulfill given requirements in IPv4 and IPv6 networks
- 5. Explain fundamental Ethernet concepts, such as media, services, and operations
- 6. Build a simple Ethernet network using routers and switches
- 7. Use Cisco command-line interface (CLI) commands to perform basic router and switch configurations
- 8. Utilize common network utilities to verify small network operations and analyze data traffic

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9. ADOPTED TEXT(S)*:

No textbook required

9a: SUPPLEMENTAL TEXTS APPROVED BY FULL TIME DEPARTMENTAL FACULTY (INSTRUCTOR MUST NOTIFY THE BOOKSTORE BEFORE THE TEXTBOOK ORDERING DEADLINE DATE PRIOR TO ADOPTION) ***.

10. OTHER REQUIRED MATERIALS: (SEE APPENDIX C FOR TECHNOLOGY REQUEST FORM.)**

CISCO NetAcademy Access and CISCO Packet Tracer Software.

11. **GRADING SCALE*****:

Grading will follow the policy in the catalog. The scale is as follows:

A: 90 - 100B: 80 - 89C: 70 - 79D: 60 - 69F: 0 - 59

12. GRADING PROCEDURES OR ASSESSMENTS: (<u>Course Syllabus – Individual</u> <u>Instructor Specific)</u>

Category	EXAMPLE ONLY Total Points	% of Grade
Chapter Assignments (10x30)	300	30%
Quizzes (10x20)	200	20%
Unit Exams (3x100)	300	30%
Assignments (5x10)	50	5%
Annual Report Project (100)	100	10%
Attendance	50	5%
Total	1000	100%

13. COURSE METHODOLOGY: (Course Syllabus – Individual Instructor Specific)

May include but not limited to: Lectures, independent and group projects, in-class and home assignments, tests, quizzes and lab exercises. This course must be offered on campus. Attendance is required.

14. COURSE OUTLINE: <u>(Course Syllabus – Individual Instructor Specific)</u> (Insert sample course outline with learning objectives tied to assignments / topics.)

Week 1: (Chapter 1) Explore the Network – Learning Objective 1

Week 2: (Chapter 2) Configure a Network Operating System – Learning Objective 7

Week 3: (Chapter 2) Configure a Network Operating System – Learning Objective 7

Week 4: (Chapter 3) Network Protocols and Communications – Learning Objective 2

Week 5: (Chapter 3) Network Protocols and Communications – Learning Objective 2

Week 6: (Chapter 4) Network Access – Learning Objective 3

Week 7: (Chapter 5) Ethernet – Learning Objective 5

Week 8: Mid-Term

Week 9: (Chapter 6) Network Layer – Learning Objective 6

Week 10: (Chapter 7) IP Addressing – Learning Objective 3

Week 11: (Chapter 8) Sub netting IP Networks – Learning Objective 4

Week 12: (Chapter 9) Transport Layer – Learning Objective 1 & 3

Week 13: (Chapter 10) Application Layer – Learning Objective 1, 8

Week 14: (Chapter 11) Build a Small Network – Learning Objective 8

Week 15: Review for the Final

Week 16: Final

15. SPECIFIC MANAGEMENT REQUIREMENTS*:**

Assignments will be evaluated according to instructor directives.

16. FERPA: *

Students need to understand that your work may be seen by others. Others may see your work when being distributed, during group project work, or if it is chosen for demonstration purposes. Students also need to know that there is a strong possibility that your work may be submitted to other entities for the purpose of plagiarism checks.

17. ACCOMMODATIONS: *

Students requesting accommodations may contact Ryan Hall, Accessibility Coordinator at rhall21@sscc.edu or 937-393-3431, X 2604.

Students seeking a religious accommodation for absences permitted under Ohio's Testing Your Faith Act must provide the instructor and the Academic Affairs office with written notice of the specific dates for which the student requires an accommodation and must do so no later than fourteen (14) days after the first day of instruction or fourteen (14) days before the dates of absence, whichever comes first. For more information about Religious Accommodations, contact Ryan Hall, Accessibility Coordinator at <u>rhall21@sscc.edu</u> or 937-393-3431 X 2604.

18. OTHER INFORMATION***:

SYLLABUS TEMPLATE KEY

* Item <u>cannot</u> be altered from that which is included in the master syllabus approved by the Curriculum Committee.

** Any alteration or addition must be approved by the Curriculum Committee

*** Item <u>should begin with language as approved in the master syllabus</u> but may be added to at the discretion of the faculty member.