COURSE TITLE: Introduction to Networking and Communications

COURSE NUMBER: CTS 1650

COURSE DESCRIPTION (with prerequisites):
The purpose of this course is to prepare a student to learn and apply the basics of computer networking using common network devices. The course covers the OSI model and industry standards network topologies, IP addressing including subnet masks, and basic network design. This course prepares students for the following industry certifications: CompTIA Network+ and Microsoft Network Fundamentals (MTA).

Prerequisite: Acceptable college-ready placement score in reading or successful completion of appropriate college-prep reading course(s). Corequisite: CTS 1346 or consent of department. 3 semester hours credit. [A]

NAME(S) OF INSTRUCTORS:
Marcus Dabai

EFFECTIVE ACADEMIC YEAR:
2012-13

REQUIRED TEXTBOOKS AND INSTRUCTIONAL SUPPLIES:
CompTIA Net+ (N10-005), Pengelly, GTS Learning, Inc., Product Code: g523eng-. Printed book includes the lab manual and labs. Please purchase bundle through the bookstore only because this is a bundle package.

GRADING POLICY:
The standing of a student in each course is expressed by one of the following letters and corresponding grading system:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A</td>
<td>90 – 100</td>
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<tr>
<td>B</td>
<td>80 – 89</td>
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<td>C</td>
<td>70 – 79</td>
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<td>D</td>
<td>60 – 69</td>
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<td>F</td>
<td>59 or less</td>
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The Chipola Catalog provides policies and procedures regarding the grading system. A student’s Grade Point Average is derived from the grading system/quality point scale.

ATTENDANCE AND WITHDRAWAL POLICIES:
Chipola College expects regular attendance of all students. Students who are absent from classes for any reason other than official college activities must satisfy the instructor concerned that the absence was due to illness or other clearly unavoidable reasons. Otherwise, the student may suffer grade loss at the discretion of the instructor. Chipola policy allows each instructor to specify in the Instructor First Day
Handout whether or not an absence is excusable and what effect the absence or tardy may have on the grade.

A student is allowed to repeat a course a maximum of three (3) times. **On the third attempt a student (1) must bear the full cost of instruction (unless waived by Student Services), (2) cannot withdraw, and (3) must receive a grade.**

**MAKE-UP POLICY:**
Chipola allows each instructor to specify in the Instructor First Day Handout the makeup policy.

**ACADEMIC HONOR CODE POLICY:**
Students are expected to uphold the Academic Honor Code. Chipola College’s Honor Code is based on the premise that each student has the responsibility to (1) uphold the highest standards of academic honesty in his/her own work; (2) refuse to tolerate academic dishonesty in the college community; and (3) foster a high sense of honor and social responsibility on the part of students. Further information regarding the Academic Honor Code may be found in the Chipola Catalog, Student Governance section.

**STUDENTS WITH DISABILITIES POLICY:**
Chipola College is committed to making all programs and facilities accessible to anyone with a disability. Chipola’s goal is for students to obtain maximum benefit from their educational experience and to effectively transition into the college environment. Students with disabilities are requested to voluntarily contact the Office of Students with Disabilities to complete the intake process and determine their eligibility for reasonable accommodations.

**LIBRARY AND ON-LINE REFERENCE MATERIALS:**
The library is a comprehensive learning resource center providing information in print, electronic, and multimedia format to support the educational objectives of the College. On-line catalogs, e-books and electronic databases can be accessed by using the LINCCWeb icon on the Chipola Library website at [www.chipola.edu/library](http://www.chipola.edu/library). If you have questions about database usage consult the “How to Use the Chipola Databases” on the Library website or call the Library at 850/718-2274 during regular hours. Library hours are posted each semester at the building entrance and on the Library website. See your Instructor First Day Handout for individual instructor recommendations and resources.

**TECHNOLOGY RESOURCES:**
The Information Technology Center, located in the library, is equipped with computer workstations. Lab hours are posted each semester at the building entrance and on the Library website. The ACE Lab, located in Building L, is available for tutoring and is equipped with computer workstations. Lab hours are posted each semester at the room entrance. The college’s learning management system is Desire 2 Learn (d2l). Classes become available on d2l on the first day of the semester. It is the student’s responsibility to log onto the d2l system the first day of class to establish the first day of
attendance and to check announcements. For further information, contact your instructor or the Director of Online Learning.

**ELECTRONIC DEVICE USAGE:**
All electronic devices such as cell phones, beepers, pagers, and related devices are to be silenced prior to entering classrooms and/or laboratories to avoid disruption. Should it become necessary for a student to leave his/her “device” on to send or receive an emergency call and/or text message, the student must inform the instructor prior to class. If the student finds it necessary to send and/or receive an emergency call and/or text message during class/lab time, he/she is instructed to take all books and belongings and step outside the classroom to deal with the situation. To minimize classroom disruption and the distraction to classmates, the student will not be permitted to reenter the classroom during that class period. Any time a test is being administered, all such devices must be turned off and put away. If a device is seen or heard during an exam, a score of zero will be given for that exam. Initial and repeated infractions may result in disciplinary action.

**DISCIPLINE SPECIFIC COMPETENCIES / LEARNING OUTCOMES:**

**Information Technology Learning Outcomes:**

**IT-1** Understand, install, configure, and use computer and network hardware and software (applicable to both AS degree in Computer Information Technology and AS degree in Network Services Technology) [CIT 1.0, 2.0, 3.0, 4.0; NET 3.0, 4.0, 5.0, 6.0]

**IT-2** Perform technical support, systems monitoring and troubleshooting activities for computer and network hardware and software (applicable to both AS degree in Computer Information Technology and AS degree in Network Services Technology) [CIT 5.0, 6.0, 7.0; NET 9.0 10.0]

**IT-3** Demonstrate general computing workplace competencies, including employability skills, customer service skills, and user training skills (applicable to both AS degree in Computer Information Technology and AS degree in Network Services Technology) [CIT 8.0, 9.0, 11.0, 12.0, 13.0; NET 11.0, 12.0, 13.0, 14.0]

**IT-4** Understand the structure, organization, and navigation of the Internet and develop a well-designed Web site (only applicable to the AS degree in Computer Information Technology) [CIT 4.0]

**IT-5** Perform systems analysis activities and develop programs using a current programming language (only applicable to the AS degree in Computer Information Technology) [CIT 2.0, 10.0]

**IT-6** Demonstrate understanding of networked environments and perform network administration activities (only applicable to the AS degree in Network Services Technology) [NET 1.0, 8.0]
IT-7 Demonstrate understanding of data communications and perform internetworking activities (only applicable to the AS degree in Network Services Technology) [NET 2.0, 7.0]

### LINKING COURSE-LEVEL STUDENT LEARNING OUTCOMES WITH DISCIPLINE-SPECIFIC COMPETENCIES, ASSESSMENT METHODS, AND ARTIFACTS

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<th>COURSE-LEVEL STUDENT LEARNING OUTCOMES FOR CTS 1650</th>
<th>DISCIPLINE-SPECIFIC COMPETENCIES</th>
<th>ASSESSMENT METHODS FOR COURSE LEVEL STUDENT LEARNING OUTCOMES</th>
<th>LEARNING ARTIFACTS FOR AS PROGRAM ASSESSMENT</th>
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<tr>
<td>• Network Fundamentals</td>
<td>IT-1, IT-2, IT-6, IT-7</td>
<td>H, Proj., Q, T</td>
<td>Proj., T</td>
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<td>• Network Media</td>
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<td>• Network Topologies and Standards</td>
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<td>• Network Hardware</td>
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<td>• TCP/IP</td>
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<td>• Routing</td>
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<td>• Virtualization</td>
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<td>• Wide Area Networking</td>
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<td>• Networking Security</td>
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<td>• The Complete Network</td>
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<td>• Troubleshooting Networks</td>
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<td>• Network Utilities and Optimization</td>
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**Assessment Codes**

- **T** = Tests
- **Pre/Post** = Pre- and Post-Tests
- **OT** = Objective Tests
- **UT** = Unit Tests
- **Q** = Quizzes
- **F** = Final Examination
- **CF** = Cumulative Final
- **EX** = Departmental Exam
- **SE** = Nat’l or State Standardized Exam
- **RPT** = Report/Presentation
- **SP** = Skills Performance
- **SD** = Skills Demonstration
- **W** = Writing Assignments
- **E** = Essays
- **DE** = Documented Essays
- **RP** = Research papers
- **J** = Jury
- **R** = Recital
- **Proj.** = Projects
- **Exp.** = Experiments
- **Cap. Proj.** = Capstone Project
- **Cap. Course** = Capstone Course
- **Prac.** = Practicum
- **Intern.** = Internship
- **H** = Homework
- **PS** = Problem Solving
- **DB** = Discussion Board
- **BO** = Behavioral Observation
- **Clin.** = Clinicals
- **CS** = Case Study
- **CP** = Case Plan
- **Port.** = Portfolio
- **Obs.** = Teacher Observation
- **Sk. Check** = Skills Check-off
- **Curriculum Frameworks**
- **JP** = Judged
- **Performance/Exhibition**

### MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:

1. Read and study assigned material from the text;
2. Complete practice exercises and daily assignments and submit in a timely manner;
3. Pursue independent study using resource materials available in the library (books, periodicals, videos), the Tech Center lab, online resources, and any other pertinent source;
4. Demonstrate your mastery of the required skills on quizzes, in-class projects, and exams.

### ASSIGNMENT AND/OR COURSE OUTLINE

See your Instructor First Day Handout for individual instructor assignment schedule.