Nashville State Community College School of STEM Computer Information Technology (Networking) Master Syllabus Spring 2023 CITC-1302-SL1 – Introduction to Networking

NSCC Course Information: Introduction to Networking, High School Course Information: DE Networking Systems S2

Section: Course Title: Introduction to Networking Credits: 3

Course Description: A broad-based course that provides an overview of computer networking. Topics include network models, protocols and services, media and topologies, devices and tools, network management, and network security. This course may align with the outcomes of industry certification. **Prerequisites**: None

Instructor Information: Name: Email: Office Phone: Office Location: Office Hours:

Textbook & Other Materials:

Textbook: *Guide to Networking Essentials by Greg Tomsho, 8th edition,* Cengage Learning, ISBN 10: 978-357-11828-3

Once enrolled, all students should verify that they have the correct textbook and materials information by consulting the D2L/NS Online shell for the course. If you are registered with the Access Center and require an alternate format for the textbook and other course materials, please contact the Access Center at 615-353-3721, 615-353-3741, or accesscenter@nscc.edu.

Course Outcomes:

Upon successful completion of this course, students should be able to

- Differentiate between the various networking media and connections
- Identify network topologies, devices, and protocols and their features and functions
- Describe the various LAN and WAN technologies in use
- Explain the features and capabilities of networking software
- Describe network management and security concepts, tools, and techniques

Course Competencies:

The following are detailed course competencies intended to support the course outcomes:

- Master networking and computer terms
- Learn about how hubs, switches, routers, etc., operate
- Recognize the difference between physical and logical topologies
- Learn about cables and connector as wells as structured cabling techniques
- Recognize purpose and operation of network protocols
- Master IP addressing concepts including classes, types of IP addresses, subnetting, etc.
- Master the concept and operations of the seven-layer OSI reference model
- Appreciate the significance of network and computer security policies aimed at protecting equipment and data
- Gain knowledge about Wide Area Networks such as frame relay, SONET, etc.
- Learn about remote access technologies and protocols
- Recognize the concept the business need for cloud computing
- Gain knowledge about the main features of Network Operating Systems

Topics to Be Covered:

- Week 1 Introducing Computer Networks
- Week 2 Network Hardware Essentials
- Week 3 Network Topologies & Technologies
- Week 4 Network Topologies & Technologies (cont.)
- Week 5 Network Media
- Week 6 Network Protocols
- Week 7 Network Protocols (cont.)
- Week 8 IP Addressing
- Week 9 Network Reference Models and Standards
- Week 10 Network Hardware in Depth
- Week 11 Introduction to Network Security
- Week 12 Wide Area Networks and Cloud Computing
- Week 13 Network OS Fundamentals
- Week 14 Network Management and Administration
- Week 15 Troubleshooting and Support

Course Assessments:

The following performance assessments will be used to demonstrate students' knowledge and skills:

Grading Policy:

- Actively participate during class sessions
- Pass chapter tests and pass final exam
- Meet all attendance requirements
- Obtain a passing grade average

Grading Scale:

Grade Average

- A = 90.0 100.0%
- B = 80.0 89.9%
- C = 70.0 79.9%
- D = 60.0 69.9%
- F = below 60%

FA: According to NSCC policy, an FA (i.e., "Failure for Attendance Reasons") is awarded to students who do not officially withdraw from a course and do not attend after the cut-off date of March 27, 2023 provided in the academic calendar. Students with an F average whose last date of attendance is before March 27, 2023 will receive an **FA**.

Students with an F average, whose last day of attendance is on or after March 27, 2023 will receive an F.

FN: An FN is awarded to students who never attended class.

W: The last day to withdraw from the course with a W is March 27, 2023.

Late Work Policy & Make-up Procedures for Missed Assignments and Work:

Students will have a week from the **start date** and until the **due date** to post their homework assignments, labs and presentations.

After the due date students will have a **three-day grace period** until the **end date**. Labs and assignments posted during the grace period will incur a **25 percent penalty**. There will be no submissions of homework assignments and labs after the end date. Tests (quizzes/exams) will be scheduled for a day and must be taken on the date these tests will be scheduled.

Attendance Policy

Regular attendance is required and is the student's responsibility. Students are **expected to attend all** scheduled classes and laboratories. Absences in a course may affect students' final grades. Students will be **responsible for all assigned work** in the course regardless of excused or unexcused absences. Tardiness may also affect students' final grades. Late arrivals in class should not exceed fifteen (15) minutes.

Students must notify instructor of any absences associated with excusable medical, family and logistical extenuating circumstances and submit **documentation and/or an explanation** in relation to a lecture missed.

Doctor's visits should also be posted via email or in person before the anticipated absence from class. Students who know beforehand that they will not be able to attend a lecture, **must send a note** to that effect to the instructor. See instructor's email address in the Instructor Information section.

Overall number of unexcused absences **should not exceed five (5) class sessions**. Fifth absence entails a warning, while the sixth absence will lead to a Failure for Attendance Reasons (FA) grade.

Technology Statement

Nashville State's classes are considered to be web-enhanced. Faculty have an expectation that students will use a computer and the Internet to complete assignments, engage in online discussions, and access various course materials through Desire2Learn (D2L)/NS Online learning management system course shells. Computers are available for student use at each campus during campus open hours.

D2L/NS Online and myNSCC Email

It is the student's responsibility to check each of your D2L/NS Online course shells and myNSCC email on a regular basis. These are the official communication channels between the college and students. Students are responsible for the information communicated through those channels. D2L contains specific course information and myNSCC contains information important for other purposes.

ADA Compliance Statement

Nashville State complies with the Americans with Disabilities Act. If you wish to request any special accommodations for any courses in which you are enrolled, contact the Access Center at 615.353.3741 or 615.353.3721, or e-mail accesscenter@nscc.edu.

Classroom Misconduct

Nashville State Community College has a zero-tolerance policy for disruptive conduct in the classroom. Students whose behavior disrupts the classroom will be subject to disciplinary sanctions. The Nashville State Student Code of Conduct policy is available at https://s3.amazonaws.com/nscc.edu/PDFs/dean-students/Student_Code_of_Conduct_Policy.pdf. Please be aware that children are not allowed in class or to be left unattended on campus.

Academic Misconduct

Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. Students are responsible for understanding and abiding by the Academic Misconduct Policy in the Nashville State Student Code of Conduct that can be found at

<u>https://s3.amazonaws.com/nscc.edu/PDFs/dean-students/Student Code of Conduct Policy.pdf</u>. In addition to other possible disciplinary sanctions that may be imposed through regular college procedures as a result of academic dishonesty the instructor has the authority to assign an "F" or a "Zero" for the exercise, paper, or examination or to assign an "F" for the course. Students may appeal through the appropriate college grade appeal procedures.

Academic Early Warning System

Nashville State Community College has implemented an Early Warning System to notify students via email about academic problems such as poor classroom attendance, poor performance on assignments/tests, poor communication skills, late/missing assignments, and/or lack of classroom participation. *Please note that Early Warning Alerts do not affect a student's academic standing.

RAVE Emergency Alert System

Emergency events can happen at any time and Nashville State Community College wants to be able notify students if and when they occur. For this reason, all students have been enrolled in the free RAVE alert system. If you have not already done so, please log in at <u>https://getrave.com/login/nscc</u> to confirm and update your contact information and notification preferences. It is critical that your information be

correct so that you will receive any emergency notifications. Your RAVE Username is your NSCC email address. If you've never received an email from RAVE with your password, or if you need to reset your password, select "Forgot your password?" and a new password will be emailed to you. Should the RAVE system indicate "user not found", select Register and create your own RAVE account.

Inclement Weather & Campus Closings

Nashville State will use the RAVE alert system to send a text message to students, staff, and faculty about adjusted hours of operation and/or closings at individual campuses. All students should check the Nashville State web site home page at www.nscc.edu for announcements on campus closures, which may vary from campus to campus. Campus closures will also be announced on local television stations. Students should use their own best judgment in determining whether to report to campus during inclement weather when classes are not cancelled.

Even when campuses are closed, students are still responsible for completing all assigned work. When classes are cancelled, faculty will post online assignments and any additional instructions in the D2L/NS Online course shell. Check D2L/NS Online for a message from your instructor regarding your online assignment requirements. Faculty have discretion over adjusting deadlines or due date for assignments, but students are responsible for completing all assigned work by the due date established by the instructor.

Class Cancellation Policy

If the class is cancelled, the instructor will notify all students by posting in the D2L/NS Online course, emailing through D2L/NS Online, and/or by posting a sign on the classroom door. In the event of class cancellation, students must access D2L/NS Online to complete classwork and the assignment that will be posted in the course D2L site.