# Pierce College at Joint Base Lewis-McChord Course Syllabus

Course dates: July 2 - August 30, 2019

**COURSE TITLE:** Data Communications and Networks

**ABBREVIATION: CIS 265** 

CREDIT HOURS: 5 INSTRUCTIONAL HOURS: 50

**INSTRUCTOR:** James Johnson

## **INSTRUCTOR INTRODUCTION:**

I have worked within the IT community since 1984 in various capacities ranging from desktop and network support, statistical analyst and network engineer, to technical manager. I earned a Masters of Arts degree in Organizational Leadership from Chapman University, and a Bachelor of Arts in Business and Management from the University of Maryland. I also hold or have held several professional certifications including: Microsoft Certified Network Administrator, Microsoft Certified Systems Engineer, Microsoft Certified Trainer, Certified Technical Trainer +, and A+ Certified Technician. Since 1994, I have owned a small business and network systems consulting firm in Puyallup, WA. In 1998, I began teaching for Pierce College and in that capacity, have served as the lead trainer for the Authorized Academic Training Partner and IT Academy programs in partnership with the Microsoft Corporation, and currently teach introduction to computing, networking, and Microsoft technology classes for Pierce College.

**COMMUNICATIONS:** All course communications will be through the Canvas course inbox.

**PREREQUISITE:** CIS 134 each with a grade of at least 2.0, or instructor permission.

**CATALOG DESCRIPTION:** An introduction to data communication and network terminology, operating concepts, network design, hardware and software. Reviews the Open System Interconnection (OSI) model as well as other major data communication models and the various specifications and standards for data communications hardware and software. Addresses the advantages and disadvantages of various network systems and their availability, flexibility and performance. Participate in the design of a data communications network.

**REQUIRED TEXT AND MATERIALS:** *Network+ Guide to Networks, 7th Edition*, Tamera Dean, Course Technologies, 2016. Textbooks are available through the college bookstore.

**COURSE GUIDANCE:** (remove red text for grounded courses; add your management policies here)

- 1. **Online Elements:** This is an online course and is available in Canvas.
- 2. **Technology Prerequisites:** This course requires some basic knowledge of computer technology. You will gain some skill and knowledge during this program; however, at a minimum, you need to be able to:
  - a) create and save MS Word documents; see MS Word tutorials for PC users (all versions); Word Help for Mac users
  - b) find basic resources on Internet; see Internet Tutorials
  - c) create and organize files & folders
  - d) send, receive, and manage email.

3. Access and Disabilities: Pierce College values diversity and inclusion; we are committed to fostering mutual respect and full participation for all students. My goal is to create a learning environment that is equitable, inclusive, and welcoming. If you have or think you may have a disability that may affect your work in this class and feel you need accommodations, contact Access and Disability Services at <a href="mailto:ADS@pierce.ctc.edu">ADS@pierce.ctc.edu</a> or (253) 912-3606 (Ft. Steilacoom) or (253) 864-3383 (Puyallup and JBLM) to see if you are eligible to receive services.

If you are already approved for accommodations through the ADS, have requested your accommodations for this quarter and would like to use your accommodations in my class please connect with me outside of class time to discuss your needs.

- 4. **Proctoring:** This course may have online proctoring required for assessments. I will furnish proctoring information very early in the course so you can make necessary arrangement well in advance of the proctored assessment(s).
- 5. **Course Expectations:** As a student, you can expect that I will respond to your e-mail within 48 hours and will grade assignments/tests/quizzes within four (4) days. Exceptions will be announced in advance. Please contact me immediately if you have not heard from me within these timelines.
- 6. **Introductions:** Students are expected to post a short (one paragraph) introduction to the course Discussions Area during the first week of the course. I have guidelines within the course for the introduction located in the **first Module**.
- 7. **Discussions:** This course may have discussions as part of the curriculum. Students may also desire to discuss topics with other students in an unscheduled manner. I, as part of the course, may publish discussion questions/topics and require your input. Should you desire to hold a discussion with other students enrolled in your course, you may be authorized to create your own discussion topics.
- 8. **Course Content:** The course is made up of eight (8) modules. Each module corresponds to one or more chapters in the textbook. Module exercises and projects are crucial for the successful completion of this course.
- 9. Course Schedule: This course is NOT self-paced. Our course runs for nine weeks. Each week begins on Monday. Assignments are due by the end of the Sunday of each week, unless approved in advance. For example, all work for Module 1 is due by the first Sunday of the course. There is limited time in this course to complete all the work. Staying on schedule ensures you complete on time. Pace yourself to complete at least one module per week of the course. Again, see the course schedule, below, for more information.
- 10. **Assignment Submissions:** Submit all assignments in Word .doc or .docx format \*only\*. If you do not have Microsoft Word, consider downloading *OpenOffice* at <a href="http://www.openoffice.org">http://www.openoffice.org</a>. Be sure to save your submissions in the correct format.
- 11. **Grade Challenges:** I grade Homework submissions manually, as the system looks for a 100% match. After I have reviewed and graded your Homework submission, if you believe you received an incorrect grade for a submission, feel free to contact me. In your message indicate exactly which submission you are challenging, which question and evidence from the textbook that supports your case. I will review the challenge and adjust your score as appropriate. I will send you a response to the challenge regardless of the score outcome.
- 12. Late Submission Policy: I expect you to access the course on a regular basis, and submit assignments and activities no less than on a weekly basis. You should pace yourself to complete at least one module per week of the course. Material for each week is due no later than the end of the week, based upon your registration date. Late submissions will receive penalties if turned in by Wednesday after the due date. Material submitted after Wednesday after the due date will lose 25% of the earned points. Submissions will not be graded, and receive a Zero (0.0) grade if submitted in excess of 1 week after the due date. Exceptions will be discussed on a one-on-one basis. Multiple submissions (in excess of three (3) at the same time, or waiting until the last minute of the course to submit your work will result in reduced points and a delayed submission of your grade.

- 13. Course Incompletes: are not automatic and must be requested from me. Incompletes must be approved and arranged with me. Should unforeseen circumstances cause need for an Incomplete Grade/extension to be issued, this can be arranged between us. However, Incompletes are not automatic, and will not be assumed and/or guaranteed. An Incomplete grade will only be granted if requested prior to the end of the course. To qualify for an Incomplete, you must have completed at least 50% of the coursework with a minimum of a 2.0 average of all work submitted at the time of the request. You must have demonstrated continued progress throughout the course to receive consideration for an extension. Last minute bulk/multiple submissions will not be considered for extensions. Requests submitted after the end of the course will not be considered. Special circumstances may be taken under consideration at my discretion.
- 14. **Student Responsibilities:** Please remember that it is your responsibility to notify me of major changes in your circumstances (e.g. deployment) that affect your ability to complete all course work within the course timeline. Although I send out weekly announcements, you should strive to make contact with me once a week, at a minimum.
- 15. **Plagiarism software:** Plagiarism software may be in use during your course. The goal of the course is for you to learn and be able to understand, explain and show how you have achieved the course outcomes. Unfortunately, some believe it's okay to copy answers found in other locations and submit it as their own work as proof of their learning. Conduct such as this is unacceptable. Submissions believed to be plagiarized will be returned the first occurrence, and you will be allowed to attempt the activity one more time. Should there be a second occurrence during the course, the submission will receive a 0 (zero) grade. A third occurrence will result in an immediate 0.0 for the course. To be sure you know, here is Pierce College's page on plagiarism
- 16. **Office Hours:** Since we are an online class, I do not schedule regular Office Hours sessions. I am available for contact via course mail or by coordinated on-line chat. We can coordinate meetings via chat, or Blackboard Collaborate, at mutually agreeable dates and times. I can also be contacted in the Pierce College office on JBLM-Main for arranged meetings.
- 17. **Etiquette** for classroom and online courses is the same. Treat others as you would like to be treated, respectfully and compassionately.
- 18. **Academic, Student and Technical Support:** Academic, Student, and Technical Support resources are available for students at Pierce College. See the Start Here document in the course for more details on the services offered.

# STUDENT OUTCOMES: Upon successful completion of this course, you should be able to:

- 1. Describe the basic hardware, software and services components used in network systems.
- 2. Compare and contrast the alternatives in LAN media, topologies, access methods, and media.
- 3. Summarize the seven layers of the open systems interconnection (OSI) reference model.
- 4. Compare and contrast the different types of network cabling.
- 5. Describe the major data link layer protocols.
- 6. Describe the major network layer protocols with an emphasis on IP, including addressing, subnetting, network address translation and IP configuration.
- 7. Describe the major functions of network operating systems and directory services.
- 8. Troubleshoot networks using standard troubleshooting tools.
- 9. Describe the advantages/disadvantages of various network protocols.

## **COURSE REQUIREMENTS:**

- 1. All students will post an Introduction during the first week of the course. Submissions in Week 2 will receive no more than 80 points. Submissions after Week 2 will receive no points. See the discussion topics within the course for more information. **This is a graded item and worth 100 points!**
- 2. This course consists of eight (8) Modules. Each Module represents approximately a week's worth of materials for the course and may cover one or more chapters from the textbook. Staying on pace will ensure you complete the course on time.

- 3. You need to read/view Module materials, appendices, resources and any Instructor Notes for each module.
- 4. There are eight (8) Modules in this course. There is a total of 2,400 points available for the course. Each chapter may have one or more hands-on projects, review questions assignments, and guizzes. Your grade is weighted. See the grading scale to determine your grade
  - a. There is an introduction discussion assignment worth 100 points.
  - b. Each chapter has a **Homework Assignment** worth 100 points.
    - i. Homework Assignments include a case project (worth up to 75 points out of the 100 points total) which must be completed to receive a grade for the submission. Note: All Case Projects must be successfully completed to pass the course. This is not negotiable. See the note in Chapter 1 Assignment 1 about using VMware for the Case Projects.

## c. Quizzes and Exams:

- i. Each chapter has a quiz worth 50 points.
- ii. The Midterm Exam covers Chapters 1-8. The Final Exams covers Chapters 9-15. Each exam is worth 250 points.
- d. All quizzes and exams are available through the course modules.
- 5. My **grading policy** is that all work is based on the textbook-based lessons, supplemental instructor resources and material, and additional reading assignments. To be consistent and fair, all answers for assessments, projects, and assignments will be from course materials as described above, unless otherwise noted. Use caution when responding to written answers use your own words and do not copy/paste from the textbook or other sources.
- 6. There are discussions topics available to ask and answer questions. See the **Course Schedule**, below, for due dates of submissions and activities. Material for each week is due no later than Sunday of the week it is presented. It is crucial you stay on pace with the course schedule.
- 7. I am available for contact via e-mail or by coordinated on-line chat.
- 8. If you are having trouble, contact me immediately so we can work through it!

## **GRADING:**

Each assignment and assessment will be given a specific point value. The earned value of all possible points will determine grade, per Pierce College published policy (see the Policies and Procedure section)

# **WEIGHT OF ASSIGNMENTS/ASSESSMENTS:**

Component	# per module	# per course	Value		
Introduction (100 pts. each)	~	1 per course	100 pts total		
Homework Assignments (100 pts. each)	Varies	12 per course	1,200 pts total		
Quiz (50 pts. each)	Varies	12 per course	600 pts total		
Mid-Term & Final Exams (250 pts. each)	~	1 each	500 pts total		
Total points for all course work = 2,400 points.					

Note: Divide your total points by the value of the assignments/assessments to calculate your current %. Multiple your total points by .1 to calculate your %.

#### **GRADE SCALE:**

<b>Grade Point:</b> 4.0 - 3.9	Letter Grade: A	<b>Percentage:</b> 100 – 95%
<b>Grade Point:</b> 3.8 - 3.5	Letter Grade: A-	Percentage: 94 – 90%
<b>Grade Point:</b> 3.4 – 3.2	Letter Grade: B+	Percentage: 89 – 87%
<b>Grade Point:</b> 3.1 – 2.9	Letter Grade: B	Percentage: 86 – 84%

<b>Grade Point:</b> 2.8 – 2.5	Letter Grade: B-	Percentage: 83 – 80%
<b>Grade Point:</b> 2.4 – 2.2	Letter Grade: C+	Percentage: 79 – 77%
<b>Grade Point:</b> 2.1 – 1.9	Letter Grade: C	Percentage: 76 – 74%
<b>Grade Point:</b> 1.8 – 1.5	Letter Grade: C-	Percentage: 73 – 70%
<b>Grade Point:</b> 1.4 – 1.2	Letter Grade: D+	Percentage: 69 – 65%
<b>Grade Point:</b> 1.1 – 1.0	Letter Grade: D	Percentage: 64 - 60%
Grade Point: 0.0	Letter Grade: F	Percentage: < 59%

# **COURSE SCHEDULE:**

You will are expected to accomplish each module's learning objectives, which align with the course outcomes, by completing the readings and assessments as listed in the schedule, below.

Week 1	Module 1	Chapter 1	Introduction Discussion, Homework 1, Quiz 1	Outcomes 1, 4, 5, 9
Week 2	Module 2	Chapters 2 and 3	Homework 2 & 3, Quiz 2 & 3	Outcomes 1, 2, 5, 9
Week 3	Module 3	Chapters 4 and 5	Homework 4 & 5, Quiz 4 & 5	Outcomes 1, 2, 5, 6, 9
Week 4	Modules 1 through 4	Review Chapters 1 through 6	Homework 6, Quiz 6 Mid-Term Exam	Outcomes 1, 2, 4, 5, 6, 9
Week 5	Module 5	Chapter 7	Homework 7, Quiz 7	Outcomes 1, 2, 4, 5, 9
Week 6	Module 6	Chapters 8 and 9	Homework 8 & 9, Quiz 8 & 9	Outcomes 1, 2, 5, 6, 9
Week 7	Module 7	Chapter 10	Homework 10, Quiz 10	Outcomes 8, 9
Week 8	Module 8	Chapter 11, 12	Homework 11 & 12, Quiz 11 & 12	Outcomes 8,9
Week 9	Modules 1 through 8	Review Chapters 8 through 12	Final Exam	Outcomes 1 through 9

# **CONSENT AGREEMENT:**

A Pierce College course requires frequent interaction with your instructor. It is, therefore, essential that you agree to the conditions set forth in the course syllabus. After you have read the course syllabus, let us know (do not wait) if you do not agree with the course conditions and requirements. If we do not hear from you within three (3) days from the start of the course, we will assume you agree with the conditions set forth in this syllabus.

# **POLICIES AND PROCEDURES:**

Access Pierce College at Joint Base Lewis-McChord and Pierce College District here: www.pierce.ctc.edu/military/canvas/Policies/index.html