

ITNW 1325 – Part II Syllabus – Spring 2012

Fundamentals of Networking Technologies

Sabine Hall
Room 216
Mon 6:00pm – 9:15pm
Section 008
CRN 72044
3 Credits

Instructor: Brian McDaniel Office Hours: By Appointment
Voice Mail: 210-588-1451 E-Mail: bmcDaniel@alamo.edu (1 Day Reply)
Office Phone: 210-486-3310 BBV: <https://vista.alamo.edu/webct/logon/2745091708011>

Course Description

Part I syllabus available at:

<http://www01.alamo.edu/pac/faculty/acardenas/syllabi/ITNW1325.htm>

Prerequisite: ITSC 1301 (Introduction to Computers), or COSC 1301 (Microcomputer Applications), or equivalent

Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. The student is introduced to digital communications between hardware devices, including local as well as long-distance transmission. Attention to topics such as hardware devices, procedures, network arrangements and compatibility problems.

The course objectives are to identify and use network transmission media; explain the OSI model; recognize the primary network topologies/protocols, identify their characteristics, and determine which would be most appropriate for a proposed network; identify the functions of a network operating system and distinguish between centralized, client/server, and peer-to-peer systems; and distinguish between Local Area Networks (LANs) and Wide Area Networks (WANs) and identify the components used to expand a LAN into a WAN. In the process of achieving the primary goal the student will also acquire or practice certain fundamental skills generally needed for success in the workplace.

This is not a vendor specific course.

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Course Materials

Required Text: Network+ Guide to Networks, Fifth Edition; Dean; Course Technology (Cengage Learning); Boston, Massachusetts; Copyright 2010; ISBN-10: 1-423-90245-9; ISBN-13: 978-1-423-90245-4; <http://course.cengage.com>

Recommended Text: Lab Manual for Network+ Guide to Networks, Fifth Edition; Grice, Verge; Course Technology (Cengage Learning); Boston, Massachusetts; Copyright 2011; ISBN-10: 1-4354-9673-6; ISBN-13: 978-1-4354-9673-6; <http://course.cengage.com>

USB Drive: Used during lab to store important hardware configuration data, utilities, and software drivers.

Disability Access Statement

In accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act, it is the responsibility of the student to self-identify with the campus Disability Services office. Only those students with appropriate documentation will receive a letter of accommodation from the Disability Services office. Instructors(s) are required to follow only those accommodations and/or services outlined in the letter of accommodation. For further information, please contact the Disability Services office at 210-486-3020 or visit the office located in the Palomino Center building, Rm. 116. If you have specific needs, please discuss them privately with your instructor.

Academic Code

You are expected to complete quizzes and examinations without assistance. You cannot submit someone else's assignment for grading, including the alteration of computer files from another student or any instructor. Refer to the *Student Code of Conduct* published in the Palo Alto College Student Handbook for specific directions.

Assignments

Review questions will be assigned from material covered in each chapter. These assignments are due one week after they are assigned, and must be submitted in the prescribed format and manner. Late assignments may be accepted with a valid excuse, at the discretion of the instructor. Refer to the *Assignment Policy* for specific directions.

Quizzes

There are five quizzes scheduled throughout the semester, each given without prior notification. Quizzes will be taken online, inside the classroom, with instructor supervision, and have a time limit. A missed quiz cannot be made up. Your lowest quiz score of the semester will be dropped.

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Exams

There will be two exams plus a cumulative final. Exams will be taken online, inside the classroom, with instructor supervision, and have a time limit. Exams may also be taken under the supervision of the Palo Alto College testing center with the prior approval and coordination of the instructor. A missed exam can only be made up with a valid excuse, and at the discretion of the instructor. No exams are dropped or curved.

Project

You are required to solve a networking scenario, provided by your instructor, using the material presented in this course. You will thoroughly document your solution in a professionally prepared proposal. At the end of the semester, you will present your proposal through a 10-15 minute oral presentation to the class. You will be provided with a format and checklist of the *minimum* items that must be included in your proposal and presentation. Additionally, you will submit hard and soft copies of both your proposal and presentation. The project is a required element of the course and must be completed and submitted for grading by the due date. Your failure to do so will result in a semester grade of incomplete (I) or failure (F) being recorded. Late projects will receive a 50% deduction.

Attendance

The Palo Alto College attendance policy will be observed, which means all classes will be attended unless excused by the instructor. Due to the nature of this course and related subject matter, you are encouraged to attend all classes as scheduled or notify the instructor as far in advance as possible of known absences. A student who is absent for any reason is responsible for all assignments and all material covered during the session(s) missed. A student who must be absent from a particular class should make arrangements to obtain notes from a classmate. Refer to the attendance and excessive absence policies published in the Palo Alto College Bulletin.

Labs

There will be “hands-on” labs, which may be accomplished during class hours or on “Open Lab” days which coincide with exam days. You may also accomplish labs on other days with the prior approval and coordination of the instructor. All labs must be accomplished at Palo Alto College in the classroom, and only while under the supervision of the instructor. Review questions will be assigned from material covered in each lab. These assignments are due one week after they are assigned, and must be submitted in the prescribed format and manner. Late assignments may be accepted with a valid excuse, at the discretion of the instructor. Refer to the *Assignment Policy* for specific directions.

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Classroom Procedures

- Be safe and tidy during lab; be wary of sharp edges, electrical hazards, and jewelry.
- All software is licensed for use by Palo Alto College only, and may not be copied for your personal use.
- Do not propagate computer viruses by bringing games or other software to the classroom. Always use an antivirus program and scan your data disk/drive often.
- Do not use the computers during lecture unless otherwise directed.
- All cell phones and pagers must be turned off, or ringers in silent mode, while in the classroom.
- Only use the classroom printer for printing assignments given in this class.

Information Concourse

Portable Group 3, Portable 109, Rooms 109A and 109B

It is #37 on this map, which is the closest portable to the Ozuna building:
http://www.alamo.edu/uploadedFiles/PAC/Website_Assets/Files/PDFs/campusmap.pdf

Mon-Thu: 7:45am – 9:00pm

Fri: 7:45am – 5:00pm

Sat: CLOSED

Sun: 1:00pm – 9:00pm

Tutoring

Sabine Hall, Room 208, Phone: 486-3314

Ms Andrea Cardenas

E-Mail: acardenas1@alamo.edu

Mon-Fri: 9:00am – 5:00pm

Course Grade

Your course grade is composed of the following items, and their weights.

Item	Percentage of Course Grade
Assignments	30%
Labs	10%
Quizzes	10%
Exam 1	10%
Exam 2	10%
Final Exam	20%
Project	10%

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Grading Scale

Your course letter grade will be determined by calculating the percentage of your total points earned out of the total points possible and using the following grading scale.

Greater Than Or Equal To	But Less Than	Letter Grade
90%	NO LIMIT	A
80%	90%	B
70%	80%	C
60%	70%	D
0%	60%	F

Calendar of Events

Date	Event
January 23	Class Begins
February 1	Census Date
February 27	Exam 1
March 12	College Closed – Spring Break
April 2	Exam 2
April 13	Last Day to Withdrawal
April 23	Project Presentation
April 30	Class Ends
May 7	Final Exam, 7:15pm – 9:15pm

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Topic, Assignment, and Lab Schedule

Date	Topic	Assignment	Lab
January 23	Course Overview Numbering Systems Blackboard Vista Orientation		
January 30	Chapter 1 (p. 1) Chapter 2 (p. 39)	p. 26-29: 1-20 p. 65-68: 1-20	Handout [Numbering Systems]
February 6	Chapter 3 (p. 73) Appendix C (p. 819)	p. 127-130: 1-20	p. 45-49: Lab 3.2 [UTP Crossover Cable]
February 13	Chapter 4 (p. 135)	p. 181-184: 1-20	p. 5-9: Lab 1.2 p. 14-19: Lab 1.4 [Peer-to-Peer Network]
February 20	Chapter 5 (p. 193) Project Status Check Exam 1 Review	p. 225-229: 1-20	p. 25-28: Lab 2.2 p. 28-31: Lab 2.3 p. 32-35: Lab 2.4 [OSI Model and TCP/IP]
February 27	Exam 1		Open Lab
March 5	Chapter 6 (p. 237) Chapter 7 (p. 297)	p. 285-289: 1-20 p. 349-352: 1-20	p. 100-104: Lab 5.4 [Ethernet Frames]
March 12	College Closed – Spring Break		
March 19	Chapter 8 (p. 363) Chapter 9 (p. 421)	p. 410-413: 1-20 p. 473-476: 1-20	Handout [UNIX Permissions]
March 26	Chapter 10 (p. 485) Project Status Check Exam 2 Review	p. 520-523: 1-20	p. 157-159: Lab 8.3 p. 237-239: Lab 12.5 [Wireless]
April 2	Exam 2		Open Lab
April 9	Chapter 11 (p. 531)	p. 564-567: 1-20	Handout [IP Address Subnetting]
April 16	Chapter 12 (p. 575) Chapter 13 (p. 635) Project Status Check	p. 624-628: 1-20 p. 674-678: 1-20	p. 242-246: Lab 13.1 p. 246-249: Lab 13.2 [Troubleshooting]
April 23	Project Presentation		
April 30	Chapter 14 (p. 683) Chapter 15 (p. 735) Final Exam Review	p. 725-728: 1-20 p. 765-769: 1-20	p. 122-124: Lab 6.5 [Firewall Configuration]
May 7	Final Exam		Open Lab