Course Description:
Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. Identify and use network transmission media; explain the OSI model; identify the characteristics of network topologies and protocols; 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.

Text, References and Supplies: Hands-On Networking Fundamentals, Palmer; 2nd ed. Cengage

Learning Objectives:
Upon successful completion of the course, students will have the ability to accomplish the following competencies accurately and efficiently:

Describe the evolution of data communication
List and describe various data communication protocols of importance
List and describe various networking standards
Describe alternative networking approaches and topologies
Describe the differences between data communication operations and data processing operations
Describe various important hardware devices used in networking
Understand the role of commercial communications companies in networking
Describe the tasks associated with network management
Describe the tasks associated with maintaining network security
Describe Wired and Wireless configurations and deployments

Student Contribution and Course Policies:
Students are encouraged to contact the instructor at any time. If you need to meet with the instructor you will need to make an appoint to guarantee the instructor's availability at a specific time. Office hours will be posted in CANVAS.

Students will be expected to exhibit professional behavior in class. With regard to cell phone use, keep it on silence and do not take calls unless it is an emergency.
Students are expected to attend class, for online that means logging in and completing assignments.

**Late Work:** Assignments will be due on the date assigned. In the event an assignment must be submitted later than the scheduled due date the student must get instructor permission.

This is an online/hybrid class. You will be expected to keep up with the assignments posted in CANVAS. You must email the professor once a week with your progress.

**Policy Information:**

This will be an in-depth, fast-paced course. It is important that you complete the assignments before the due dates. Late work will not be accepted. There will be no exceptions to this policy.

*Should you find that you are unable to complete the course, it is necessary for you to contact the Office of Student Services at Midland College and officially drop the class; otherwise a grade of “F” will be given for the semester grade.*

**Class Policy:**

It is each student’s responsibility to become familiar with Midland College policies as explained in the Midland College Student Handbook. Cheating, plagiarism, and any other form of academic dishonesty will not be tolerated.

**Evaluation of Students:**

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<tbody>
<tr>
<td>Lab</td>
<td>45%</td>
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<tr>
<td>Final Exams</td>
<td>20%</td>
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<tr>
<td>Chapter Exams</td>
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<tr>
<td><strong>Total</strong></td>
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90 and above    A
80-89            B
70-79            C
60-69            D
59 and below     F

**Course Schedule:** This class meets for 3 lecture hours.

**SCANS Information:** SCANS skills are taught and/or reinforced in energy/petroleum courses. The student must locate, read, interpret and understand instruction information and direction materials. The participant must communicate thoughts, ideas and information through verbal and written mediums. Practical arithmetic and mathematics will apply continually throughout energy/petroleum training. Listening, interpreting, and responding to verbal communications and instructions as well as speaking in response to questioning will be a daily involvement. Thinking, reasoning, visualizing and problem
solving are required assets to the energy/petroleum field. The student/participant must display responsibility, self-management and honesty.

**Administrative Information:**

Curt Pervier, Division Chair Technical Studies

Lisa Hays, Division Secretary
Technical Studies
Office: Rm 143 TC
Phone: (432) 685-4676
Fax: (432) 685-6472

Students should feel free to contact the instructor at any time. Appointments are encouraged for advising and planning the most appropriate or beneficial course work.

*Syllabus subject to change as deemed necessary by the instructor to ensure learning objectives and course goals are met.

**Students with Disabilities:**

Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must place documentation on file with the Counselor/Disability Specialist. Students with disabilities should notify Midland College prior to the beginning of each semester. Student Services will provide each student with a letter outlining any reasonable accommodations. The student must present the letter to the instructor at the beginning of the semester.
Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individuals have been designated to handle inquiries regarding the non-discrimination policies: Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu. For further information on notice of non-discrimination, visit http://wdcrobc01.ed.gov/CFAPPS/OCR/contactus.cfm or call 1 (800) 421-3481.

Spanish

Midland College no discrimina por motivos de raza, color, nacionalidad, sexo, discapacidad, o edad en sus programas o actividades. Las siguientes personas han sido designadas para responder a cualquier pregunta o duda sobre estas políticas no discriminatorias: Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu. Para más información sobre estas políticas no discriminatorias, visite http://wdcrobc01.ed.gov/CFAPPS/OCR/contactus.cfm o llame al 1 (800) 421-3481.