Contractual Arrangements and Technical PLA Programs

Oklahoma State Regents for Higher Education

CONTRACTUAL ARRANGEMENTS AND/OR TECHNICAL PRIOR LEARNING ASSESSMENT PROGRAM REQUEST FORM

Rose State College
Institution Submitting Proposal

Networking/Cybersecurity Associate in Applied Science (111)
Program name and State Regents' three-digit program code

Mid-Del Technology Center
Contractual Entity

Date of Governing Board Approval: 09/17/15

Signature of President: [Signature] Date: 09/17/15

Signature of Other Entity Signatory: [Signature] Date: 09/21/15

State Regents' Policy 3.6 and 3.15
http://www.okhigpered.org/admin-fac/academic-forms/
Thank you for your submission. Based on the information detailed below, the Commission has determined that it has sufficient information to constitute notification of the contractual relationship per policy and no further action is required. If you have any further questions, please send an email to changerequests@hlcommission.org.

Name: Dr. Frances M. Hendrix  
Institution: 1635 - Rose State College - OK  
City: Midwest City  
State: Oklahoma  
Email address: fhendrix@rose.edu  
Phone number: 405.733.7395

You confirm you are authorized to provide the Commission with information regarding your institution's contractual arrangements.

Academic program: Network and System Administration/Administrator  
CIP code: 11.1001  
Course catalog name: Computer Hardware and Operating Systems  
Program or credential level: Associate  
Expected start date: 2015-08-18  
Contractual partner: Mid-Del Technology Center  

Total program credit hours: 62  
Credit hours taught by contractual partner: 9  
Calculated percentage: 14.52

The percentage taught by the contractual partner is less than 25%.  
Does the contractual partner provide oversight of the curriculum? Yes  
Does the contractual partner provide assurance of the consistency? Yes  
Does the contractual partner establish academic qualifications for instructional personnel? Yes

The percentage representing the aggregate of the contractual partner's total efforts: Less than 25%
Thank you for your submission. Based on the information detailed below, the Commission has determined that it has sufficient information to constitute notification of the contractual relationship per policy and no further action is required. If you have any further questions, please send an email to changerequests@hlcommission.org.

Name: Dr. Frances M. Hendrix  
Institution: 1635 - Rose State College - OK  
City: Midwest City  
State: Oklahoma  
Email address: fhendrix@rose.edu  
Phone number: 405.733.7395

You confirm you are authorized to provide the Commission with information regarding your institution's contractual arrangements.

Academic program: Network and System Administration/Administrator  
CIP code: 11.1001  
Course catalog name: Networks  
Program or credential level: Associate  
Expected start date: 2015-08-18  
Contractual partner: Mid-Del Technology Center

Total program credit hours: 62  
Credit hours taught by contractual partner: 9  
Calculated percentage: 14.52

The percentage taught by the contractual partner is less than 25%.  
Does the contractual partner provide oversight of the curriculum? Yes  
Does the contractual partner provide assurance of the consistency? Yes  
Does the contractual partner establish academic qualifications for instructional personnel? Yes

The percentage representing the aggregate of the contractual partner's total efforts: Less than 25%
Thank you for your submission. Based on the information detailed below, the Commission has determined that it has sufficient information to constitute notification of the contractual relationship per policy and no further action is required. If you have any further questions, please send an email to changerequests@hlcommission.org.

Name: Dr. Frances M. Hendrix  
Institution: 1635 - Rose State College - OK  
City: Midwest City  
State: Oklahoma  
Email address: fhendrix@rose.edu  
Phone number: 405.733.7395

You confirm you are authorized to provide the Commission with information regarding your institution's contractual arrangements.

Academic program: Network and System Administration/Administrator  
CIP code: 11.1001  
Course catalog name: Unix/Linux  
Program or credential level: Associate  
Expected start date: 2015-08-18  
Contractual partner: Mid-Del Technology Center

Total program credit hours: 62  
Credit hours taught by contractual partner: 9  
Calculated percentage: 14.52

The percentage taught by the contractual partner is less than 25%.  
Does the contractual partner provide oversight of the curriculum? Yes  
Does the contractual partner provide assurance of the consistency? Yes  
Does the contractual partner establish academic qualifications for instructional personnel? Yes

The percentage representing the aggregate of the contractual partner's total efforts: Less than 25%
Contractual Arrangement and/or Technical Prior Learning Assessment Program Request Form

The proposal for a contractual arrangements or technical prior learning assessment (PLA) program should provide the following information.

NOTE: INFORMATION NOT INCLUDED IN THE PROPOSAL MAY CAUSE A DELAY IN PROCESSING.

1. A signature page (institutional president and entity’s signatory) that includes the names of the participating college and other entity.

2. Name of college-level certificate or degree program(s) toward which credit will be awarded, including the State Regents’ three-digit program code and any options.

(The size of the box is NOT an indicator of the amount of information required to address the request. Please include as much information as necessary [the boxes will expand].)

3. Will this arrangement include:

   ☑ contractual arrangement   ☐ technical assessments (PLA)   ☐ Combination of both

4. List a) technical courses on the Statewide Contractual Course Inventory/Technical Crosswalk, b) assessments on the Statewide Inventory of Industrial, Technical and Other Assessments, and/ or c) general education courses that will be included in the contractual or technical PLA program.

   a) Technical Courses in Contractual Arrangements:

<table>
<thead>
<tr>
<th>Higher Education Course: CIT 1523 Computer Hardware and Operating Systems</th>
<th>Contractual Technical Course: A+</th>
<th>Approved for listing on Statewide Contractual Course Inventory/Technical Crosswalk?</th>
<th>Yes</th>
<th>No</th>
<th>X Request Pending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher Education Course: CIT 1503 Networks</td>
<td>Contractual Technical Course: Network +</td>
<td>Approved for listing on Statewide Contractual Course Inventory/Technical Crosswalk?</td>
<td>Yes</td>
<td>No</td>
<td>X Request Pending</td>
</tr>
<tr>
<td>Higher Education Course: CIT 2243 Unix/Linux+</td>
<td>Contractual Technical Course: Linux+</td>
<td>Approved for listing on Statewide Contractual Course Inventory/Technical Crosswalk?</td>
<td>Yes</td>
<td>No</td>
<td>X Request Pending</td>
</tr>
<tr>
<td>Higher Education Course:</td>
<td>Contractual Technical Course:</td>
<td>Approved for listing on Statewide Contractual Course Inventory/Technical Crosswalk?</td>
<td>Yes</td>
<td>No</td>
<td>Request Pending</td>
</tr>
</tbody>
</table>

State Regents’ Policy 3.6 and 3.15

http://www.okhighered.org/admin-fac/academic-forms/
| Higher Education Course: | Contractual Technical Course: | Approved for listing on Statewide Contractual Course Inventory/Technical Crosswalk?  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes  No  Request Pending</td>
</tr>
</tbody>
</table>

b) Technical Assessments (PLA):

| Higher Education Course: | Technical Assessment: | Approved for listing on the Statewide Matrix of Industrial, Technical and Other Assessments?  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td></td>
<td>Yes  No  Request Pending</td>
</tr>
</tbody>
</table>

| Higher Education Course: | Technical Assessment: | Approved for listing on the Statewide Matrix of Industrial, Technical and Other Assessments?  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes  No  Request Pending</td>
</tr>
</tbody>
</table>

| Higher Education Course: | Technical Assessment: | Approved for listing on the Statewide Matrix of Industrial, Technical and Other Assessments?  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes  No  Request Pending</td>
</tr>
</tbody>
</table>

(Add rows as needed)

c) General Education Courses:

<table>
<thead>
<tr>
<th>Higher Education Course:</th>
<th>Location?</th>
<th>Delivery Method?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Higher Education Course:</th>
<th>Location?</th>
<th>Delivery Method?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Higher Education Course:</th>
<th>Location?</th>
<th>Delivery Method?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Add rows as needed)
5. Detail the maximum number of college credit hours to be articulated through contractual technical courses or technical assessments and the maximum college credit awarded toward the degree for work completed outside the institution¹.

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total credit hours articulated through contractual technical courses</td>
<td>9</td>
</tr>
<tr>
<td>Total credit hours articulated through technical assessments</td>
<td>0</td>
</tr>
<tr>
<td>Total credit hours that can be applied to the degree through approved contractual technical courses and/or assessments</td>
<td>9</td>
</tr>
<tr>
<td>Total credit hours in general education</td>
<td>0</td>
</tr>
<tr>
<td>Total credit hours required for the degree</td>
<td>68</td>
</tr>
</tbody>
</table>

¹ Note: the Higher Learning Commission requires that at least “15 of the 60 credits for the associate’s degree be credits earned at the institution itself, through arrangements with other accredited institutions, or through contractual relationships approve by the Commission.” However, any time the credit from outside the institution surpasses 50%, a higher level of scrutiny/review from HLC should be expected.

6. Description of the contractual entity’s classroom and laboratory facilities and how they will be utilized.

Mid-Del Technology Center offers facilities and equipment which allows students to learn in a computer-based, laboratory environment for students to apply what they have learned to their assignments. Mid-Del also offers a lecture environment which allows faculty to demonstrate concepts to students from an instructional station.

7. Academic credentials of contractual entity’s faculty responsible for classroom and laboratory experiences. (Include a summary document here. Full vitae, resume and certifications must be included as attachments, as well as documentation of the institutional process for credential and/or experience evaluation for contractual entity’s faculty.)

College faculty supervising the contractual arrangement or application of PLA credit for the program:
N/A
Contractual entity’s faculty teaching in the contractual arrangement:
Mr. Johnny Clark, Computer Repair and Networking/Programming Program faculty member, B.S., Industrial Technology Education, Oklahoma State University; Microsoft MCSE, Norvell CNE, Comp TIA A+, BICSI Level 2 Technician

8. Outline the process to assure quality academic programming and continuous improvement in the contractual arrangement or technical PLA program.

Rose State College faculty reviewed the Mid-Del Technology Center curriculum and determined that the curriculum duplicated 9 credit hours of instruction that occurs through the Networking/CyberSecurity Associate in Applied Science degree program at Rose State College. Rose State College faculty reviewed the credentials of faculty from Mid-Del Technology Center to ensure faculty hold credentials that meet the minimum requirements for adjunct and full-time faculty assignments at Rose State College. Rose State College faculty added the Mid-Del Technology Center faculty to the Rose State College Family Networking/CyberSecurity program advisory committee. Rose State College faculty were added to the Mid-Del Technology Center Computer Repair and Networking Program

9. Describe the criteria for assessment of student outcomes in each contractual technical course and/or assessment.

See attached syllabus.

10. To maintain quality courses, the higher education institution will designate an appropriate individual to direct and oversee the contractual arrangement. Provide the name of the individual as well as the

In addition to the full-time Networking/CyberSecurity Program faculty member and director, Mr. Ken Dewey, Ms. Jerri Cachero, Coordinator for Technology Center Programs, Rose State College, oversees all contractual arrangements with technology centers to ensure that students are advised and enrolled appropriately, serves as the liaison between faculty representatives from the technology centers and the college. She holds meetings with faculty on campus, meets with faculty and staff at each technology center, and arranges and holds joint meetings. She also develops the annual Technology Center catalog, meets with admissions and enrollment staffs from the technology center and on campus, and hosts students from the technology centers on campus on enrollment/advisement days. In addition, she attends advisory committees, and other statewide meetings at the Oklahoma State Regents for Higher Education.

State Regents' Policy 3.6 and 3.15

http://www.okhighered.org/admin-fac/academic-forms/
criteria and procedures that will be used for an annual evaluation of courses. (Note if same or different from #7)

11. Describe the academic and student support services available to students enrolled in the contractual arrangement.

Students from the technology center are hosted on campus. Students are enrolled on campus by Academic Advisors, tour the campus and receive financial aid/college life information from Prospective Student Services and are taken on a campus-wide tour. Students complete their admissions forms, take COMPASS exams, are enrolled and attend various related seminars on campus. Students have access to the College's website services such as those available in the Learning Resources Center and receive a Rose State College student I.D. card which grants students' rights and privileges of a Rose State College student.

A college liaison visits each campus on a weekly basis to assist with questions related to degree completion, financial aid deadlines, Ticket to Rose, etc., and serves as an advisor to these students at their technology center.

12. Outline the financial arrangements between the institution and the contractual entity if different from that specified in policy; this should include student tuition and other charges applicable to the contractual arrangement.

Students pay the state-adopted rate of $8.00 per credit hour since instruction takes place at the technology center under the technology center budget.

13. Indicate if high school students may be enrolled in this contractual arrangement and/or any restriction based on age of students due to the nature of the technical field, licensure requirements, etc.

High school students are eligible for enrollment provided that they meet the admission requirements under the cooperative agreement policy.
COOPERATIVE AGREEMENTS PROGRAM
ROSE STATE COLLEGE/EASTERN OKLAHOMA COUNTY TECHNOLOGY CENTER
Fall 2015 – Spring 2016

Rose State College – Business & Information Technology Division
Degree: A.A.S. - Networking/Cybersecurity (0111)
Contact: Professor Ken Dewey
Division Academic Advisor: Mr. Steve Johnson

EOC Technology Center Program: Computer Repair and Networking
Contact: Mr. Tom Buntin

Credit Total: 15 hours

<table>
<thead>
<tr>
<th>RSC Course Number and Title</th>
<th>EOC Tech Center Units Covered</th>
<th>Credit Hours</th>
<th>RSC Faculty Initials</th>
<th>Tech Center Faculty Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 1523 Computer Hardware and Operating Systems A+</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIT 1503 Network</td>
<td>Network+</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIT 2053 Network Administration</td>
<td>INF 2253 Windows XP Pro</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>INF 2213 Managing Server 2003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIT 2423 Network Troubleshooting and Management Design INF 2223 Maintaining a Network INF 2233 Planning a Network Infrastructure</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(More on following page)
Computer Repair and Troubleshooting I
137.5 Hours

General Course Information

Instructor: Johnny L. Clark
Office: Room 104
Office Hours: 2:00-3:00 PM
Phone: (405)739-1707
Mail: MDTC, 1621 Maple Drive, Midwest City, OK 73110
E-mail: jclark@mid-del.net
Web site: http://www.middeltech.com
Classroom: Room 104
Class Times: 7:45 AM-1:50 PM
College Alliance Credit: Rose State College (CIT 2023) Microcomputer Hardware and Operating Systems (Note: Student must complete Computer Repair and Troubleshooting I & II to earn for this credit.)

Prerequisites: Successful completion of Fundamentals of Technology or Brainbench Computer Fundamentals Test or Brainbench Computer Literacy Test


Course Objectives
This course is intended for students who want to learn how to install and configure Microsoft operating systems and application software. This course prepares a student to pass the A+ (220-801) certification exam from CompTIA. It does assume prior knowledge of Fundamentals of Technology and is geared toward those interested in computer repair. The course provides comprehensive coverage of topics related to A+ certification.

Specific topic coverage includes:
- Installing, upgrading, and troubleshooting Windows XP, Windows Vista, and Windows 7
- Troubleshooting common Microsoft operating system problems
- Working with virtualization technologies
- Understanding safety and environmental issues
Grading and Evaluation Criteria

25% of the grade is based on chapter examinations. An exam study guide will be completed prior to each examination.

25% of the grade is based on daily conduct. All students begin with 100 points each semester with points being deducted for negative behavior and bonus points being awarded for positive behavior.

50% of the grade is based on Learning Activity Packets (LAPs). Students are given various academic (theory) and hands-on tasks to be completed prior to the chapter examination.

11-Week Course Outline

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Chapter Readings</th>
<th>Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lab Safety, Brainbench Computer Literacy (Win 7) and Brainbench Computer Fundamentals (Win 7)</td>
<td>Hand-outs</td>
<td>Safety Test Computer Literacy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Computer Fund.</td>
</tr>
<tr>
<td>1</td>
<td>The Path of the PC Tech</td>
<td>Chapter 1</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>2</td>
<td>Operational Procedures</td>
<td>Chapter 2</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>3</td>
<td>The Visible PC</td>
<td>Chapter 3</td>
<td>Chapter 3</td>
</tr>
<tr>
<td>4</td>
<td>Virtualization</td>
<td>Chapter 30</td>
<td>Chapter 30</td>
</tr>
<tr>
<td>5</td>
<td>Visible Windows</td>
<td>Chapter 4</td>
<td>Chapter 4</td>
</tr>
<tr>
<td>6</td>
<td>Implementing Hard Drives</td>
<td>Chapter 12</td>
<td>Chapter 12</td>
</tr>
<tr>
<td>7</td>
<td>Installing and Upgrading Windows</td>
<td>Chapter 14</td>
<td>Chapter 14</td>
</tr>
<tr>
<td>8</td>
<td>Working with the Command-Line Interface</td>
<td>Chapter 18</td>
<td>Chapter 18</td>
</tr>
<tr>
<td>9</td>
<td>Maintaining and Optimizing Windows</td>
<td>Chapter 17</td>
<td>Chapter 17</td>
</tr>
<tr>
<td>10</td>
<td>Windows Under the Hood</td>
<td>Chapter 15</td>
<td>Chapter 15</td>
</tr>
<tr>
<td>11</td>
<td>Troubleshooting Windows</td>
<td>Chapter 19</td>
<td>Chapter 19</td>
</tr>
</tbody>
</table>
Network/Client Operating Systems
175 Hours

General Course Information

Instructor: Johnny Clark
Office: Room 104
Office Hours: 2:00-3:00 PM
Phone: (405)739-1707
Mail: MDTC, 1621 Maple Drive, Midwest City, OK 73110
E-mail: jclark@mid-del.net
Web site: http://www.middletech.com
Classroom: Room 104
Class Times: 7:45 AM -1:50 PM
College Alliance Credit: Rose State College (CIT 2243) Unix/Linux+

Prerequisites: Successful completion of CompTIA Network+ Curriculum


Course Objectives
This course is intended for students who want to learn about the Linux operating system and prepare to pass the Linux+ certification exams from CompTIA (Powered by LPI – LX0-101 & LX0-102). It does not assume any prior knowledge of Linux and is geared toward those interested in systems administration as well as those who will use or develop programs for Linux systems. The course provides comprehensive coverage of topics related to Linux certification, including Linux distributions, installation, administration, X-Windows, networking, and security.

Specific topic coverage includes:
• Introduction to Linux
• Linux Installation and Usage
• Exploring Linux Filesystems
• Linux Filesystem Management
• Linux Filesystem Administration
• Advanced Installation
• Working with the BASH Shell
• System Initialization and X Windows
• Managing Linux Processes
• Common Administrative Tasks
• Compression, System Backup, and Software Installation
• Network Configuration
• Configuring Network Services
• Troubleshooting, Performance, and Security
Grading and Evaluation Criteria

25% of the grade is based on chapter examinations. An exam study guide will be completed prior to each examination.

25% of the grade is based on daily conduct. All students begin with 100 points each semester with points being deducted for negative behavior and bonus points being awarded for positive behavior.

50% of the grade is based on Learning Activity Packets (LAPs). Students are given various academic (theory) and hands-on tasks to be completed prior to the chapter examination.

14-Week Course Outline

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Chapter Readings</th>
<th>Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Linux</td>
<td>Chapter 1</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>2</td>
<td>Linux Installation and Usage</td>
<td>Chapter 2</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>3</td>
<td>Exploring Linux Filesystems</td>
<td>Chapter 3</td>
<td>Chapter 3</td>
</tr>
<tr>
<td>4</td>
<td>Linux Filesystem Management</td>
<td>Chapter 4</td>
<td>Chapter 4</td>
</tr>
<tr>
<td>5</td>
<td>Linux Filesystem Administration</td>
<td>Chapter 5</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>6</td>
<td>Advanced Installation</td>
<td>Chapter 6</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>7</td>
<td>Working with the BASH Shell</td>
<td>Chapter 7</td>
<td>Chapter 7</td>
</tr>
<tr>
<td>8</td>
<td>System Initialization and X Windows</td>
<td>Chapter 8</td>
<td>Chapter 8</td>
</tr>
<tr>
<td>9</td>
<td>Managing Linux Processes</td>
<td>Chapter 9</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>10</td>
<td>Common Administrative Tasks</td>
<td>Chapter 10</td>
<td>Chapter 10</td>
</tr>
<tr>
<td>11</td>
<td>Compression, System Backup, and Software Installation</td>
<td>Chapter 11</td>
<td>Chapter 11</td>
</tr>
<tr>
<td>12</td>
<td>Network Configuration</td>
<td>Chapter 12</td>
<td>Chapter 12</td>
</tr>
<tr>
<td>13</td>
<td>Configuring Network Services</td>
<td>Chapter 13</td>
<td>Chapter 13</td>
</tr>
<tr>
<td>14</td>
<td>Troubleshooting, Performance, and Security</td>
<td>Chapter 14</td>
<td>Chapter 14</td>
</tr>
</tbody>
</table>
Computer Repair and Troubleshooting II
262.5 Hours

General Course Information

Instructor: Johnny L. Clark
Office: Room 104
Office Hours: 2:00-3:00 PM
Phone: (405)739-1707
Mail: MDTC, 1621 Maple Drive, Midwest City, OK 73110
E-mail: jclark@mid-del.net
Web site: http://www.middeltech.com
Classroom: Room 104
Class Times: 7:45 AM - 1:50 PM
College Alliance Credit: Rose State College (CIT 2023) Microcomputer Hardware and Operating Systems (Note: Student must complete Computer Repair and Troubleshooting I & II to earn for this credit.)

Prerequisites: Successful completion of Fundamentals of Technology or Brainbench Computer Fundamentals Test or Brainbench Computer Literacy Test


Course Objectives
This course is intended for students who to repair, service and troubleshoot personal computers and computer-related equipment. This course prepares a student to pass the A+ (220-802) certification exam from CompTIA. It does assume prior knowledge of Computer Repair and Troubleshooting I and is second half of the A+ Training. The course provides comprehensive coverage of topics related to A+ certification.

Specific topic coverage includes:
- Working with CPUs, RAM, BIOS settings, motherboards, power supplies, and other PC components
- Installing, configuring, and troubleshooting hard drives
- Managing input devices and removable media
- Troubleshooting common PC hardware problems
- Installing video and multimedia cards
- Installing and configuring wired and wireless networks
- Connecting to the Internet
- Protecting your PC and your network
- Installing, configuring, and managing printers
Grading and Evaluation Criteria

25% of the grade is based on chapter examinations. An exam study guide will be completed prior to each examination.

25% of the grade is based on daily conduct. All students begin with 100 points each semester with points being deducted for negative behavior and bonus points being awarded for positive behavior.

50% of the grade is based on Learning Activity Packets (LAPs). Students are given various academic (theory) and hands-on tasks to be completed prior to the chapter examination.

21-Week Course Outline

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Chapter Readings</th>
<th>Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power Supplies</td>
<td>Chapter 10</td>
<td>Chapter 10</td>
</tr>
<tr>
<td>2</td>
<td>Microprocessors</td>
<td>Chapter 6</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>3</td>
<td>RAM</td>
<td>Chapter 7</td>
<td>Chapter 7</td>
</tr>
<tr>
<td>4</td>
<td>BIOS</td>
<td>Chapter 8</td>
<td>Chapter 8</td>
</tr>
<tr>
<td>5</td>
<td>Motherboards</td>
<td>Chapter 9</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>6</td>
<td>Hard Drive Technologies</td>
<td>Chapter 11</td>
<td>Chapter 11</td>
</tr>
<tr>
<td>7</td>
<td>Removable Media</td>
<td>Chapter 13</td>
<td>Chapter 13</td>
</tr>
<tr>
<td>8</td>
<td>Input Devices</td>
<td>Chapter 20</td>
<td>Chapter 20</td>
</tr>
<tr>
<td>9</td>
<td>Video</td>
<td>Chapter 21</td>
<td>Chapter 21</td>
</tr>
<tr>
<td>10</td>
<td>Multimedia</td>
<td>Chapter 25</td>
<td>Chapter 25</td>
</tr>
<tr>
<td>11</td>
<td>Portable Computing</td>
<td>Chapter 26</td>
<td>Chapter 26</td>
</tr>
<tr>
<td>12</td>
<td>Mobile Devices</td>
<td>Chapter 27</td>
<td>Chapter 27</td>
</tr>
<tr>
<td>13</td>
<td>Printers</td>
<td>Chapter 28</td>
<td>Chapter 28</td>
</tr>
<tr>
<td>14</td>
<td>Visible Networks</td>
<td>Chapter 5</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>15</td>
<td>Local Area Networking</td>
<td>Chapter 22</td>
<td>Chapter 22</td>
</tr>
<tr>
<td>16</td>
<td>Wireless Networking</td>
<td>Chapter 23</td>
<td>Chapter 23</td>
</tr>
<tr>
<td>17</td>
<td>The Internet</td>
<td>Chapter 24</td>
<td>Chapter 24</td>
</tr>
<tr>
<td>18</td>
<td>NTFS, Users, and Groups</td>
<td>Chapter 16</td>
<td>Chapter 16</td>
</tr>
<tr>
<td>19</td>
<td>Securing Computers</td>
<td>Chapter 29</td>
<td>Chapter 29</td>
</tr>
<tr>
<td>20</td>
<td>The Right PC for You</td>
<td>Chapter 31</td>
<td>Chapter 31</td>
</tr>
<tr>
<td>21</td>
<td>The Complete PC Tech</td>
<td>Chapter 32</td>
<td>Chapter 32</td>
</tr>
</tbody>
</table>
Network & Routing Fundamentals
230 Hours

General Course Information

Instructor: Johnny L. Clark
Office: Room 104
Office Hours: 2:00-3:00 PM
Phone: (405)739-1707
Mail: MDTC, 1621 Maple Drive, Midwest City, OK 73110
E-mail: jclark@mid-del.net
Web site: http://www.middletech.com
Classroom: Room 104
Class Times: 7:45 AM - 1:50 PM
College Alliance Credit: Rose State College (CIT 1503) Introduction to Networks

Prerequisites: Successful completion of CompTIA A+ Curriculum


Course Objectives
This course is intended for students who want to learn about the basics of Local Area Networks (LANs) and Wide Area Networks (WANs) and prepare to pass the Network+ certification exam from CompTIA (N10-005). It does assume prior knowledge of CompTIA A+ Objectives and is geared toward those interested in systems administration. The course provides comprehensive coverage of topics related to Network+ certification.

Specific topic coverage includes:
- Building a network with the OSI and TCP/IP models
- Configuring network hardware, Topologies, and cabling
- Connecting multiple Ethernet components
- Installing and configuring routers and switches
- Working with TCP/IP applications and network protocols
- Configuring IPv6 routing protocols
- Setting up clients and servers for remote access
- Configuring wireless networks
- Securing networks with firewalls, NAT, Port filtering, packet filtering, and other methods
- Implementation of virtualization
- Building a SOHO network
- Managing and troubleshooting networks
Grading and Evaluation Criteria

25% of the grade is based on chapter examinations. An exam study guide will be completed prior to each examination.

25% of the grade is based on daily conduct. All students begin with 100 points each semester with points being deducted for negative behavior and bonus points being awarded for positive behavior.

50% of the grade is based on Learning Activity Packets (LAPs). Students are given various academic (theory) and hands-on tasks to be completed prior to the chapter examination.

**18-Week Course Outline**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Chapter Readings</th>
<th>Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CompTIA Network+ in a Nutshell &amp; Network Models</td>
<td>Chapter 1 &amp; 2</td>
<td>Chapter 1 &amp; 2</td>
</tr>
<tr>
<td>2</td>
<td>Cabling and Topology &amp; Ethernet Basics</td>
<td>Chapter 3 &amp; 4</td>
<td>Chapter 3 &amp; 4</td>
</tr>
<tr>
<td>3</td>
<td>Modern Ethernet</td>
<td>Chapter 5</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>4</td>
<td>Installing a Physical Network</td>
<td>Chapter 6</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>5</td>
<td>TCP/IP Basics</td>
<td>Chapter 7</td>
<td>Chapter 7</td>
</tr>
<tr>
<td>6</td>
<td>The Wonderful World of Routing</td>
<td>Chapter 8</td>
<td>Chapter 8</td>
</tr>
<tr>
<td>7</td>
<td>TCP/IP Applications</td>
<td>Chapter 9</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>8</td>
<td>Network Naming</td>
<td>Chapter 10</td>
<td>Chapter 10</td>
</tr>
<tr>
<td>9</td>
<td>Securing TCP/IP</td>
<td>Chapter 11</td>
<td>Chapter 11</td>
</tr>
<tr>
<td>10</td>
<td>Advanced Networking Devices</td>
<td>Chapter 12</td>
<td>Chapter 12</td>
</tr>
<tr>
<td>11</td>
<td>IPv6</td>
<td>Chapter 13</td>
<td>Chapter 13</td>
</tr>
<tr>
<td>12</td>
<td>Remote Connectivity</td>
<td>Chapter 14</td>
<td>Chapter 14</td>
</tr>
<tr>
<td>13</td>
<td>Wireless Networking</td>
<td>Chapter 15</td>
<td>Chapter 15</td>
</tr>
<tr>
<td>14</td>
<td>Protecting Your Network</td>
<td>Chapter 16</td>
<td>Chapter 16</td>
</tr>
<tr>
<td>15</td>
<td>Virtualization</td>
<td>Chapter 17</td>
<td>Chapter 17</td>
</tr>
<tr>
<td>16</td>
<td>Network Management</td>
<td>Chapter 18</td>
<td>Chapter 18</td>
</tr>
<tr>
<td>17</td>
<td>Building a SOHO Network</td>
<td>Chapter 19</td>
<td>Chapter 19</td>
</tr>
<tr>
<td>18</td>
<td>Network Troubleshooting</td>
<td>Chapter 20</td>
<td>Chapter 20</td>
</tr>
</tbody>
</table>