Network Operating System
CPTR 2272

Course Description
This course teaches functions of a network operating system so the student can effectively maintain and manage a network. The student learns how to establish and oversee the operations of a network, create logins, design and establish directory structures, and implement security.

Prerequisite: CPTR 1148, Microcomputer Operating Systems OR CPTR 1001 Introduction to Programming & Scripting OR CPTR 1122 Microcomputer Maintenance

Course Ethical Foundation
This course requires students to build and demonstrate working projects. The design and implementation will follow the ethical guidelines of the Association for Computing Machinery (ACM). Students should contact the instructor with specific ethical questions.

Text and References
ISBN: 9781305078628
Title: Hands-on Ms.windows Server 2016 - (2nd 17 Edition)
Author: Michael Palmer
Publisher: CENGAGE
Statement of Use: Required

ISBN: 9781935080657
Title: TestOut Server Pro 2016: Install and Storage
Author: TESTOUT
Publisher: TESTOUT
Statement of Use: Required

A portable computer capable of completing the class assignments is required. The portable must be capable of successfully running a VMware Player image of 4 GB of RAM and 60 GB disk.

Student Contributions
Each student will spend at least 4 hours per week preparing for class. Attendance is critical in this class. Students will come to class prepared to discuss the assigned reading or topic. Students will manage their time to complete the class requirements.

Sometimes students will ask; did I miss anything important in the class I missed? The answer is yes. The student is responsible for contacting a classmate for the details.

Any student with a disability that might affect performance in this class is encouraged to contact the instructor at the beginning of the course.

Course Evaluation
Article Reports
Students will choose a current article dealing with network servers. The article must be published in a professional magazine within one month of the article report due date. Contact your instructor with questions about appropriate articles.

Article reports are worth a total of 100 points.

<table>
<thead>
<tr>
<th>Rubric</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>The article report post is in the correct D2L BRIGHTSPACE discussion group and is the first original post for this</td>
<td>5</td>
</tr>
</tbody>
</table>
class. The instructor must give permission to use the same article report for another class.

The article report is no earlier than two months from due date and the report includes a valid URL to the original article.

The article report includes the author's name and does not include any quotes or plagiaristic copy from the article.

The article report is not an attachment to the discussion post.

The article report summary is more than 5 sentences and less than 10 sentences.

The article report impact statement is more than 2 sentences and less than 5 sentences. The article report is the first original post for this class. The instructor must give permission to use the same article report for another class.

The article report presentation in class or a 2 to 5 sentence reaction to three other article reports are done by the due date.

The article report summary and reaction contain less than two spelling or grammar errors as defined by the instructor's word processor spelling and grammar checker.

Labs
All the lab sections are pass/fail unless otherwise noted in the lab assignment. Each lab section successfully completed is 25 points. Each lab is worth 100 points. A successful completed lab section consists of the lab section elements done to the instructor's specifications. Students may modify incomplete lab sections until the date specified in the calendar. All labs must be completed by the final due date for that group of labs. Students upload completed lab assignments to the correct D2L BRIGHTSPACE drop box.

Quizzes
Students will take 10 quizzes given on the D2L BRIGHTSPACE site. Each quiz deals with a specific chapter(s) in the assigned text. The weekly quiz will be available at 1:00 am on Sunday of the quiz week and will close at 10:00 pm on Saturday of the quiz week. Students will have a maximum of one hour to complete each weekly quiz. Students may use the text and other references to complete the quiz.

Students may not reschedule a quiz.

Skills Final
Each student must complete the class assigned skills final. This is worth a total of 500 points toward the student's final grade. Detail information about the final comes later in the semester.

Scale
100% - 90%    A
89% - 80%    B
79% - 70%    C
69% - 60%    D
59% - 0    F

The midterm grade calculation for this class is the following.

Your midterm grade includes Labs 1 through 4, Quizzes 1 through 5 and Article Report 1.

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Max Percent</th>
<th>Max Points</th>
<th>Min Percent</th>
<th>Min Points</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>100%</td>
<td>1000</td>
<td>90%</td>
<td>900</td>
</tr>
<tr>
<td>B</td>
<td>89.99%</td>
<td>899.9</td>
<td>80%</td>
<td>800</td>
</tr>
<tr>
<td>C</td>
<td>79.99%</td>
<td>799.9</td>
<td>70%</td>
<td>700</td>
</tr>
<tr>
<td>D</td>
<td>69.99%</td>
<td>699.9</td>
<td>60%</td>
<td>600</td>
</tr>
<tr>
<td>F</td>
<td>59.99%</td>
<td>599.9</td>
<td>0%</td>
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</tr>
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</table>

The final class calculation for this class is the following.

Your final grade includes Labs 1 through 10, Quizzes 1 through 10, Article Reports 1 through 3 and the Portfolio (Final).

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Max Percent</th>
<th>Max Points</th>
<th>Min Percent</th>
<th>Min Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100%</td>
<td>2700</td>
<td>90%</td>
<td>2430</td>
</tr>
<tr>
<td>B</td>
<td>89.99%</td>
<td>2429</td>
<td>80%</td>
<td>2160</td>
</tr>
<tr>
<td>C</td>
<td>79.99%</td>
<td>2159</td>
<td>70%</td>
<td>1890</td>
</tr>
</tbody>
</table>
Federal and state regulations require that a Last Date of Attendance be recorded in the grading system for any student who has failed to attend class during a period of 14 consecutive calendar days, without having arranging with the instructor for such an absence. An absence of 14 days will result in a grade of "FW" on a student's transcripts. An "FW" will be included in completion rate calculations, but does not affect Grade Point Average (GPA).

The instructor reserves the right to modify grades for extraordinary reasons.

The grade incomplete is very difficult for students. Students that need this option must discuss an incomplete with the instructor two weeks before the class final.

Classroom Management
This class prepares students for professional work. It is important students learn and practice the norms expected of a working professional in Information Technology. It is important for students avoid inappropriate or offensive images or speech.

The class instructor is responsible for the class environment. This means anything that distracts members of the class from learning is a concern. In the event of a distraction, a meeting is set up with the class instructor or college administrator. The result of this meeting must be a written plan to deal with the distractions. The affected parties must approve the plan within 72 hours. Failure to create or follow the plan may result in expulsion.

Stealing is against the law. There are many forms of stealing. Plagiarism is simply stealing someone else’s work. In some cases, working in groups could be stealing or cheating. Failure to give proper credit or doing required individual work with unauthorized resources results at least a 100% reduction of points in the assignment to entire class failure. Students may help each other. One measure of cheating or not, is both students able to complete the assignment without the other? Students are encouraged to contact the instructor with questions.

Department policy requires student to use email address provided by M STATE. Students must arrange to configure a system to use and at least weekly check for class email. Additional department policies are at http://brazil.minnesota.edu.

Industry practice, Minnesota State, and M STATE policy and procedures do not allow sharing of logons/logins. Each student will be the only person using the assigned logon/login. Contact your instructor with any questions or concerns.

Occasionally students will want to make recordings of class lectures. The instructor must give permission to students to record the class lecture. Normally the instructor grants permission for recording for the student’s educational use only. Once the school term is complete, students must effectively destroy the recordings. The recording may not be distributed. Contact your instructor with any questions.

It may be desirable for the instructor to make recordings of class lectures. Students will know before the recording of the lecture begins. Class students will know about the allowed use of class lecture recordings. Contact your instructor with any questions.

Accessibility Statement
M State is committed to providing equal access to education for all students. Students who have a disability or believe they may have a disability are invited to contact the Accessibility Services office as soon as possible to determine eligibility and/or submit accommodation requests. For questions or to request accommodations, contact Student Development Services or 218.299.6882, or stop by room E112A. For additional information, visit the M State Accessibility Services website.

Any student with a disability that might affect performance in this class is encouraged to contact the instructor at the beginning of the course.

ACADEMIC PERFORMANCE SYSTEM Statement
M State has an Academic Performance system in order to provide a means for M State to do everything in its power to help each M State student succeed. This system allows instructors to report when students are not attending, not doing
well on assignments and would benefit from tutoring, needs to be connected with resources either on or off campus, or is failing the course. This system is also a way for instructors to reward the positive behavior you are demonstrating in class by submitting a “Wow, Well-done!” If you receive an e-mail or phone call from Student Development Services regarding your performance, this is because I have used the system.

FN, FW, and W Statement If you decide not to complete a course at M State, you must abide by set deadlines: FN: Federal regulations require that a FN (No Show) grade be submitted if a student does not participate in a course before the end of the add drop period. If you do not actively participate by August 31st, you will earn an FN (Education Policies – Failure for Non-Attendance policy). FW: Federal regulations also require that a FW (Failure to Withdraw) grade be submitted and last date of attendance be recorded in the grading system for any student who has “ceased active participation for 14 consecutive calendar days (including holidays) prior to the end of the term” (Education Policies - Failure to Withdraw policy). W: If you decide to withdraw after August 31st, you must do so by the end of the day on November 28th, 2018. If you meet this deadline, you will have a W (which represents Withdraw) on your transcript (unless you have already earned an FW for not participating for 14 calendar days); if you do not meet this deadline, you will earn a grade in the course (Education Policies - Drop/Add/Withdraw policy).

ACADEMIC INTEGRITY AND HONESTY Statement*
At M State “students are expected to meet their academic requirements with honesty and integrity” (Student Handbook 17). Examples of academic dishonesty include cheating, plagiarizing, self-plagiarizing, altering source information, creating information and attributing it to a source, and working collaboratively and not crediting all creators. Note that your handbook specifies that “all students are expected to be the sole authors of their work and acknowledge the authorship of others’ work through proper citation and reference. Use of another person’s ideas, including another student’s, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct” (17). For more information about M State’s policy regarding academic dishonesty see page 17 of the Student Handbook.

In this course, if I determine that an assignment, is an example of academic dishonesty—I will assess the situation and one of the following penalties will occur *

SOCIAL WORKER/HOUSING AND FOOD INSECURITY Statement
If you face challenges securing food or housing and believe this may affect your performance in the course, you are urged to contact Student Development Services for support. You are also welcome to share this information with me so that I am able to help facilitate the support.

SERVICE MEMBER Statement
M State is dedicated to assisting veterans and eligible family members in achieving their educational goals. If you are a member of the military and are currently serving, apprise me of regularly scheduled military training and duties that conflict with scheduled course requirements. I will work with you to address issues that arise. For further information on this, refer to MnSCU Procedure 5.12.1 Military Service and Disabled Veterans.

If you are a service member or veteran, please contact an M State Veterans Higher Education Regional Coordinator for information regarding educational benefits and opportunities: Moorhead: D124 Aaron Jensen 218-299-6925 or 218-329-6040 (cell) /aaron.jensen@state.mn.us

Additional Policy Statements
Understanding the College’s policies and procedures will help contribute to your success as a student, and it is something we expect of you. You may find the Student Handbook at www.minnesota.edu/handbook.

This document is the plan of action for the class.

Course Schedule

Week01
1/14/2019, Monday
Classes Begin
1/15/2019, Tuesday
Introduction
VMware Setup
1/16/2019, Wednesday
Last Day to add classes
1/18/2019, Friday
Last Day to drop classes
Week02
1/20/2019, Sunday
  Quiz 01 opens at 1:00 am over Chapter 01
1/21/2019, Monday
  MSCTC - Martin Luther King Holiday - no classes
1/22/2019, Tuesday
  Chapter 01
  Lab 01
1/26/2019, Saturday
  Quiz 01 closes at 10:00 pm over Chapter 01

Week03
1/27/2019, Sunday
  Quiz 02 opens at 1:00 am over Chapter 03
1/29/2019, Tuesday
  Chapter 03
  Lab 02
2/2/2019, Saturday
  Quiz 02 closes at 10:00 pm over Chapter 03

Week04
2/3/2019, Sunday
  Quiz 03 opens at 1:00 am over Chapter 04
2/5/2019, Tuesday
  Chapter 04
  Lab 03
2/9/2019, Saturday
  Lab 01 due at 10:00 pm
  Quiz 03 closes at 10:00 pm over Chapter 04

Week05
2/10/2019, Sunday
  Quiz 04 opens at 1:00 am over Chapter 09
2/12/2019, Tuesday
  Chapter 09
  Lab 04
2/16/2019, Saturday
  Quiz 04 closes at 10:00 pm over Chapter 09

Week06
2/17/2019, Sunday
  Quiz 05 opens at 1:00 am over Chapter 05
2/18/2019, Monday
  MSCTC-President Day Holiday - no classes
2/19/2019, Tuesday
  Chapter 05
  Lab 05
2/23/2019, Saturday
  Quiz 05 closes at 10:00 pm over Chapter 05

Week07
2/26/2019, Tuesday
  Article Report 01
  Lab Work
3/2/2019, Saturday
  Labs 02, 03, and 04 due at 10:00 pm
  Article Report 01 non-class presenting responses due at 10:00 pm
**Week 08**
3/3/2019, Sunday
   Quiz 06 opens at 1:00 am over Chapter 07
3/5/2019, Tuesday
   Chapter 07
   Lab 06
3/9/2019, Saturday
   Quiz 06 closes at 10:00 pm over Chapter 07

**Week 09**
3/11/2019, Monday
   Spring Break - no classes
3/12/2019, Tuesday
   Spring Break - no classes
3/13/2019, Wednesday
   Spring Break - no classes
3/14/2019, Thursday
   Spring Break - no classes
3/15/2019, Friday
   Spring Break - no classes

**Week 10**
3/17/2019, Sunday
   Quiz 07 opens at 1:00 am over Chapter 06
3/19/2019, Tuesday
   Chapter 06
   Lab 07
3/23/2019, Saturday
   Quiz 07 closes at 10:00 pm over Chapter 06

**Week 11**
3/24/2019, Sunday
   Quiz 08 opens at 1:00 am over Chapter 08
3/26/2019, Tuesday
   Chapter 08
   Lab 07
3/30/2019, Saturday
   Quiz 08 closes at 10:00 pm over Chapter 08

**Week 12**
4/2/2019, Tuesday
   Article Report 02
   Lab Work
4/6/2019, Saturday
   Labs 05, 06, and 07 due at 10:00 pm
   Article Report 02 non-class presenting responses due at 10:00 pm

**Week 13**
4/7/2019, Sunday
   Quiz 09 opens at 1:00 am over Chapter 10
4/9/2019, Tuesday
   Chapter 10
   Lab 08
4/10/2019, Wednesday
   Administration Day - no classes
4/13/2019, Saturday
   Quiz 09 closes at 10:00 pm over Chapter 10

**Week 14**
4/14/2019, Sunday
   Quiz 10 opens at 1:00 am over Chapter 11
4/16/2019, Tuesday
   Chapter 11
   Lab 09
4/20/2019, Saturday
   Quiz 10 closes at 10:00 pm over Chapter 11

**Week 15**
4/23/2019, Tuesday
   Chapters 12 and 2
   Lab 10

**Week 16**
4/29/2019, Monday
   Article Report 03
   Lab Work
5/4/2019, Saturday
   Labs 08, 09, and 10 due at 10:00 pm
   Article Report 03 non-class presenting responses due at 10:00 pm

**Week 17**
5/6/2019, Monday
   MSCTC-Finals
5/7/2019, Tuesday
   MSCTC-Finals
5/8/2019, Wednesday
   MSCTC-Finals
   MSTATE Finals due at 10:00 pm
5/9/2019, Thursday
   MSCTC- Grading Day
5/10/2019, Friday
   MSTATE Moorhead Campus Commencement

The instructor reserves the right to modify the schedule and/or lab requirements.

Developed: August 15, 2001
Revised: January 2, 2019