Linux 1  
CPTR 2224

Course Description
This course deals with Linux installation, configuration, and system administration. This course lays the groundwork for continue study of Linux.

Prerequisites: None (3 C/ 2 lecture/presentation, 1 lab, 0 other)

Competencies
- Create Linux accounts.
- Manage Linux accounts.
- Prepare appropriate documentation.
- Analyze graphical environments.
- Write simple shell scripts.
- Manage application software.
- Manage security.
- Evaluate fault-tolerance solutions.
- Use appropriate software and commands.
- Manage printing.

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) and the System Administration Guild (SAGE). Students should contact the instructor with specific ethical questions.

Text and References

A portable computer capable of completing the class assignments is required. The portable must be capable of successfully running a VMware Player x64 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.

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.

Course Evaluation

Article Reports
Students will choose a current article dealing with Linux/Unix/BSD base systems. The article must be publish in a professional magazine within two months of the article report due date. Contact your instructor with questions about appropriate articles.

Article reports are worth a total of 100 points.
### Rubric

<table>
<thead>
<tr>
<th>Rubric</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Article Report is posted in the correct Discussion Group.</td>
<td>5</td>
</tr>
<tr>
<td>The student discussion group posting title is the article title.</td>
<td>5</td>
</tr>
<tr>
<td>The student discussion group posting does not include any files.</td>
<td>5</td>
</tr>
<tr>
<td>The student discussion group posting includes the URL to the original article.</td>
<td>5</td>
</tr>
<tr>
<td>The student discussion group posting includes the article publish date. The date must not be more than two months prior to the due date.</td>
<td>5</td>
</tr>
<tr>
<td>The student discussion group posting includes the author's name.</td>
<td>5</td>
</tr>
<tr>
<td>The student discussion group posting includes a summary of at least five sentences and no more than ten sentences.</td>
<td>25</td>
</tr>
<tr>
<td>The student discussion group posting includes an impact/relevance statement of at least two sentences and no more than five sentences.</td>
<td>25</td>
</tr>
<tr>
<td>The student presents a posted article report during the assigned class or provides at least a two sentence reaction to three posted article reports.</td>
<td>10</td>
</tr>
<tr>
<td>The student discussion group contains no spelling or grammar errors as defined by the instructor's word processor and grammar checker.</td>
<td>10</td>
</tr>
</tbody>
</table>

### 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 Assignments area.

### 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

<table>
<thead>
<tr>
<th>Scale</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% - 90%</td>
<td>A</td>
</tr>
<tr>
<td>89% - 80%</td>
<td>B</td>
</tr>
<tr>
<td>79% - 70%</td>
<td>C</td>
</tr>
<tr>
<td>69% - 60%</td>
<td>D</td>
</tr>
<tr>
<td>59% - 0</td>
<td>F</td>
</tr>
</tbody>
</table>

### 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>
</tr>
</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>
<td>0</td>
</tr>
</tbody>
</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>
<tr>
<td>D</td>
<td>69.99%</td>
<td>1889</td>
<td>60%</td>
<td>1620</td>
</tr>
<tr>
<td>F</td>
<td>59.99%</td>
<td>1619</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

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.

The instructor does record the class, if he remembers. The class recordings are available through a link on D2L Bright Space. 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.

**Accessibility Resources 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 connect with the Accessibility Resources Office as soon as possible to determine eligibility and/or submit accommodation requests. Please visit M State Accessibility Resources section of the M State site to apply for services, to contact Accessibility Resources personnel, or for additional information.

For additional information, visit the “Accessibility Resources” section of the M State site.

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 as listed above.

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. To learn more about education opportunities and benefits visit the “Veterans Services” section of the M State site and contact Aaron Johnson, the regional Veteran Service coordinator at 218.329.6040.

Title IX: Sexual Violence
M State is committed to creating a safe and open learning environment for all students. If you or someone you know has experienced sexual harassment, including sexual assault, dating or domestic violence, or stalking, please know that help and support are available. M State strongly encourages all members of the community to take action, seek support, and report incidents of sexual harassment to the Title IX Office. Please visit “Title IX Section” of the M State Site.

If you wish to speak to a confidential resource, you may utilize the following contacts:

• M State Counselors: Visit the “Meet the Counselors” section of the M State Site

For more information about reporting options or to submit a report online and for additional resources, please visit "Title IX" Section of the M State Site.

Title IX: Pregnancy, Childbirth, & Breastfeeding
M State does not discriminate against any student on the basis of pregnancy or related conditions. Absences due to medical conditions relating to pregnancy will be excused for as long as deemed medically necessary by a student’s doctor, and
students will be given the opportunity to make up missed work. Students needing pregnancy-related accommodations can seek assistance from the Title IX Office. Please visit the "Title IX" Section of the M State Site or "Accessibility Resources" section of the M State site.

**Basic Needs Support**
M State recognizes that many students experience challenges (e.g., accessing enough food to eat every day, safe and stable housing, issues with childcare, family obligations, physical and mental health, unexpected bills or issues with accessing technology) that create stress and anxiety in their lives outside the classroom, and those challenges can impact their academic performance.

As a student, your safety, health, and well-being are our primary concerns, and we (all who work at M State) want to be able to support you in any way that we can.

If you are facing challenges, you are urged to visit the Basic Needs Support Section of the M State Site to access a variety of resources and or/contact one of M State's social workers.

**Counseling Services**
M State Counseling Services offers free and confidential counseling to all students. Referrals to community agencies for students needing or wanting longer term or specialized resources is also available. Counseling Services are offered to students of all backgrounds, races, religious beliefs, sexual orientations, gender identities, abilities, ethnicities, and cultures in a safe place to discuss and resolve issues that interfere with personal and academic goals. Information can be found at Counseling Services.

Students also have free, 24/7 access to TalkCampus, which is a global mental health support network offering peer support to students from across the globe. Students can download the app or go to the website.

**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.

Additional information is at http://brazil.minnesota.edu/syllabus/syllabus.html or http://sweden.minnesota.edu/syllabus/syllabs.html.

This document is the plan of action for the class.

**Course Schedule**

**Week01**
8/21/2023, Monday
First Day of Classes
Introduction
8/23/2023, Wednesday
Last Day to add classes.
Introduction
VM setup
8/25/2023, Friday
Last Day to drop classes.

**Week02**
8/27/2023, Sunday
Quiz 01 opens at 1:00 am over Shotts Chapters 1 and 2
8/28/2023, Monday
Chapters 1 and 2
8/30/2023, Wednesday
Lab 01
9/2/2023, Saturday
Quiz 01 closes at 10:00 pm over Shotts Chapters 1 and 2

**Week 03**
9/3/2023, Sunday
Quiz 02 opens at 1:00 am over Shotts Chapters 3 and 4
9/4/2023, Monday
Labor Day - no classes
9/6/2023, Wednesday
Chapters 3 and 4, Lab 02
9/9/2023, Saturday
Lab 01 due at 10:00 pm
Quiz 02 closes at 10:00 pm over Shotts Chapters 3 and 4

**Week 04**
9/10/2023, Sunday
Quiz 03 opens at 1:00 am over Shotts Chapters 5 and 6
9/11/2023, Monday
Chapters 5 and 6
9/13/2023, Wednesday
Lab 03
9/15/2023, Friday
Priority application deadline for fall commencement.
9/16/2023, Saturday
Quiz 03 closes at 10:00 pm over Shotts Chapters 5 and 6

**Week 05**
9/17/2023, Sunday
Quiz 04 opens at 1:00 am over Shotts Chapter 9
9/18/2023, Monday
Chapter 09
9/20/2023, Wednesday
Lab 04
9/23/2023, Saturday
Quiz 04 closes at 10:00 pm over Shotts Chapter 9

**Week 06**
9/25/2023, Monday
Lab Work
9/26/2023, Tuesday
Admin Duty Day – no classes
9/27/2023, Wednesday
Article Report 01
9/30/2023, Saturday
Labs 02, 03, and 04 due at 10:00 pm
Article Report 01 non class presenting responses due at 10:00 pm

**Week 07**
10/1/2023, Sunday
Quiz 05 opens at 1:00 am over Shotts Chapters 19 and 20
10/2/2023, Monday
Scripting
10/4/2023, Wednesday
Scripting
10/7/2023, Saturday  
   Quiz 05 closes at 10:00 pm over Shotts Chapters 19 and 20

**Week 08**  
10/8/2023, Sunday  
   Quiz 06 opens at 1:00 am over Shotts Chapters 24, 25, 26 and 27  
10/9/2023, Monday  
   Scripting  
10/11/2023, Wednesday  
   Lab 05  
10/14/2023, Saturday  
   Quiz 06 closes at 10:00 pm over Shotts Chapters 24, 25, 26 and 27

**Week 09**  
10/16/2023, Monday  
   Chapters 24, 25, 26 and 27  
10/18/2023, Wednesday  
   Lab 06  
10/19/2023, Thursday  
   MSCTC Fall Break - no classes.  
10/20/2023, Friday  
   MSCTC Fall Break - no classes.  
10/21/2023, Saturday

**Week 10**  
10/22/2023, Sunday  
   Quiz 07 opens at 1:00 am over Shotts Chapter 28, 29, 30 and 31  
10/23/2023, Monday  
   Registration opens for spring semester.  
   Chapters 28, 29, 30 and 31  
10/25/2023, Wednesday  
   Lab 07  
10/28/2023, Saturday  
   Quiz 07 closes at 10:00 pm over Shotts Chapter 28, 29, 30 and 31

**Week 11**  
10/29/2023, Sunday  
   Quiz 08 opens at 1:00 am  
10/30/2023, Monday  
   Chapters 14 and 23  
11/1/2023, Wednesday  
   Lab 08  
11/4/2023, Saturday  
   Quiz 08 closes at 10:00 pm

**Week 12**  
11/5/2023, Sunday  
   over Shotts Chapters 14 and 23  
11/6/2023, Monday  
   Lab Work  
11/8/2023, Wednesday
Article Report 02
11/10/2023, Friday
Veterans Day - no classes

11/11/2023, Saturday
Labs 05, 06, and 07 due at 10:00 pm
Article Report 02 non class presenting responses due at 10:00 pm over Shotts Chapters 14 and 23

Week 13
11/12/2023, Sunday
Quiz 09 opens at 1:00 am over Shotts Chapters 16 and 17

11/13/2023, Monday
Chapter 16

11/15/2023, Wednesday
Lab 08

11/18/2023, Saturday
Quiz 09 closes at 10:00 pm over Shotts Chapters 16 and 17

Week 14
11/20/2023, Monday
Chapter 17

11/22/2023, Wednesday
Last day to withdraw.
Lab 09

11/23/2023, Thursday
Thanksgiving Holiday - no classes

11/24/2023, Friday
Thanksgiving Holiday - no classes

Week 15
11/26/2023, Sunday
Quiz 10 opens at 1:00 am over Shotts Chapters 15, 18 and 22

11/27/2023, Monday
Chapters 15, 18 and 22

11/29/2023, Wednesday
Lab 10

12/2/2023, Saturday
Quiz 10 closes at 10:00 pm over Shotts Chapters 15, 18 and 22

Week 16
12/4/2023, Monday
Lab Work

12/6/2023, Wednesday
Article Report 03

12/9/2023, 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
12/11/2023, Monday
MSCTC-Finals

12/12/2023, Tuesday
MSCTC-Finals

12/13/2023, Wednesday
Final Due at 10:00 pm

12/14/2023, Thursday
Grading Day

12/15/2023, Friday
MSCTC-Finals
Commencement

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

Developed: December 5, 2000
Revised: August 16, 2023