

**MONTGOMERY COLLEGE**  
**Rockville Campus**  
**Engineering, Physical and Computer Sciences Department**  
**CMSC250 Unix/Linux Operating System**

**Instructor Information**

Name:	Office Location:
Mailbox Location:	Office Phone:
Email:	Office Hours:

**Course Information**

Semester:	Course CRN:
Class starts:	Class ends:
Midterm Exam:	Final Exam:
Check MyMC class schedule for your Specific Deadline to Drop without a grade W or to change from audit to credit or from credit to audit.	Check MyMC class schedule for your Specific Deadline to drop a class with a W grade.
Online via Blackboard and MC Linux Server	Check MyMC class schedule for your Specific Refund Deadlines.

**Course Description**

Presents an overview of the components, structure, and features of the UNIX operating system. Students experience hands-on operation of the interrelating UNIX operating system components. Projects of moderate difficulty reinforce concepts.

**PREREQUISITE(S):** *A grade of C or better in CMSC 140 or consent of department. Three hours each week. Formerly CS 216.*

**Course Outcomes**

#	Upon completion of the course, the student will be able to:
1.	Describe the history, characteristics, features, structure, components, and general functions of the UNIX operating system.
2.	Apply their knowledge of the fundamental UNIX utilities.
3.	Manipulate UNIX files and directories.
4.	Describe the life cycle of a Shell process.
5.	Develop, modify, and debug UNIX Shell scripts.
6.	Utilize UNIX software development tools.

**Course Materials**

Guide to UNIX using Linux, by Michael Palmer, Fourth Edition

Lab Facilities/Media Resources

LINUX operating system is available in Montgomery College computer labs through Putty.

Textbook and other materials may be purchased through the bookstore

**Technical Requirements for This Course**

- ❖ Putty and VNC  
See for download: BB->Course Content->Tools for this class->ssvnc.zip  
Extract ssvnc.zip as "ssvnc" folder to your C:\drive (i.e. C:\ssvnc)  
Then for running: In "C:\ssvnc\Windows" folder you will see "ssvnc.exe" files  
and in the "C:\ssvnc\Windows\util" folder you will see the latest "putty.exe" file.
- ❖ Bitvise SSH Client  
See for download: <https://www.bitvise.com/ssh-client-download>

- ❖ click on "Bitvise SSH Client installer", download and install it.
- ❖ FileZilla 3.36.0  
See for download: <https://filezilla-project.org/>
- ❖ Pick a way to receive messages for CMSC250 via [remind.com](https://remind.com)  
If you have a smartphone, get push notifications. On your iPhone or Android phone, open your web browser and go to a link provided by Instructor in the Blackboard. Follow the instructions to sign up for Remind. You'll be prompted to download the mobile app.  
Don't have a mobile phone? You can use a desktop computer to sign up for email notifications

### **Grade Basis**

Final Examination	20%
Midterm Exam	10%
Quizzes	15%
Assignments (Discovery/Hands-On)	40%
Online Discussions	15%
<b>Total:</b>	<b>100%</b>

### **Grading Scale:**

90 - 100%	A
80 - 89%	B
70 - 79%	C
60 - 69%	D
Below 60%	F

### **General Class Policies**

- ❖ You are responsible for all work missed, and for meeting assignment due dates when absent. Please call or email your instructor if you are going to be late or absent.
- ❖ You are strongly encouraged to contact your instructor at home by phone or e-mail if you are having difficulties, or have any questions about assignments.
- ❖ All assignments are expected to be the result of your own efforts, not the collaboration with others. Plagiarism or turning in an assignment which is essentially identical to that of another student will result in a zero for that assignment, with no opportunity to make up the grade.
- ❖ Please include your name and the course information in the submitted assignments.
- ❖ There is always a means to submit your assignments on time. Be creative, be persistent, and keep your instructor informed!
- ❖ All assignments must be turned in on or before the due dates to receive full credits.
- ❖ **Missed Tests, Quizzes, and Discussions.** As a rule: NO MAKEUPS without a doctor's excuse. If the final exam is not taken, the student will receive a grade of F for the course.

## Course Schedule

Topics
Chapter 1 The Essence of UNIX
Chapter 2 Exploring the UNIX/Linux File Systems and File Security
Chapter 3 The UNIX Editors The vi Editor The Emacs Editor
Chapter 4 UNIX File Processing Extracting Information from Files Assembling Extracted Information
Chapter 5 Advanced File Processing Selecting, Manipulating, and Formatting
Chapter 5 Advanced File Processing Selecting, Manipulating, and Formatting
Chapter 6 Introduction to Shell Programming Creating and Completing the Corporate Phones Application
<b>Midterm Exam</b>
Chapter 7 Advanced Shell Programming Developing a Fully Featured Program
Chapter 7 Advanced Shell Programming Developing a Fully Featured Program
Chapter 8 Exploring the UNIX Utilities Using the UNIX Utilities
Chapter 9 Perl and CGI Programming
Chapter 10 Developing UNIX/Linux Applications in C and C++
Chapter 10 Developing UNIX/Linux Applications in C and C++
Chapter 11 The X Window System Course Review
Preparation for the Final Exam <b>Final Exam</b>