

**MONTGOMERY COLLEGE**  
**Rockville Campus**  
**Engineering, Physical and Computer Sciences Department**  
**CMSC253 UNIX/LINUX System Administration**

**Instructor Information**

Name:  
Mailbox:  
Email:  
Office Hours:

Office Location:  
Office Phone:

**Course Information**

Semester:  
Class starts:  
Class Meetings:  
Midterm Exam:

Course CRN:  
Class ends:  
Classroom:  
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 Refund Deadlines

**Course Description**

Introduction to concepts, procedures, tasks, and utilities of UNIX/LINUX system administration. Topics include UNIX/LINUX system architecture, user administration, process management, software installation and management, hierarchy, creation, and management of file systems, device configuration and management, as well as networking fundamentals.

**PREREQUISITE(S):** CMSC 110 or NWIT 127, or consent of department. Four hours each week. Formerly CS 253.  
4 semester hours

**Course Outcomes**

#	Upon completion of the course, the student will be able to:
1.	Install UNIX/LINUX operating system
2.	Configure UNIX/LINUX kernel
3.	Describe UNIX/LINUX system architecture
4.	Describe the administrative tasks of the OS
5.	Utilize system utilities to perform administrative tasks
6.	Run and configure essential system processes
7.	Describe the file system hierarchy
8.	Create and maintain file systems
9.	Perform backup and recovery
10.	Create and maintain users and groups
11.	Install and configure application software
12.	Manage and configure devices
13.	Install and configure network components

**Course Materials**

Textbook: LabSim for Testout Linux Pro

Check the handout on LabSim (to order directly from Testout) or contact MC Bookstore at Germantown for purchase (if you are on Financial Aids).

### **Grade Basis**

Final Examination	20%
LabSim Chapter Labs and Practice Questions (150+)	55%
Quizzes (3)	15%
Labs (3) (MyMC Blackboard Assignments)	10%
<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.
- ❖ Please include your name and the course information in the submitted assignments.
- ❖ Incomplete assignments receive no more than 50% of the grade.
- ❖ Assignments are considered incomplete, if they do not compile, they do not contain reasonable comments.
- ❖ There is always a means to submit your assignments on time. Be creative, be persistent, and keep your instructor informed!
- ❖ All assignments (Tests, Quizzes, Assignments, and Labs) must be turned in on or before the due dates to receive full credits.
- ❖ Missed Tests, Quizzes, Assignments, and Projects: 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 Topics**

<b>Topics</b>
Chapter 0 Introduction
Chapter 1 Using Linux
Chapter 2 Installation and Localization
Chapter 3 Boot and Shutdown
Chapter 4 User Interfaces and Desktops
Chapter 5 Software Installation
Chapter 6 Users and Groups
Chapter 7 Disk and File System Management
Chapter 8 Hardware Installation
Chapter 9 Processes and System Svcs
Chapter 10 System Monitoring
Chapter 11 Networking
Chapter 12 Security
Final Exam