COURSE SYLLABUS
COMMUNITY COLLEGE OF AURORA
Fundamentals of Unix
Summer, 2007

Census Date 06/14/07 (Last day to drop and receive a refund)

WITHDRAW DEADLINE** 7/29/07 (Last day to Withdraw to get a "W" grade, no refund)

SECTION I: COURSE IDENTIFICATION

COURSE TITLE: Fundamentals of Unix

COURSE DESCRIPTION CIS220: Covers the structure and fundamentals of the
UNIX operating system. Includes the files system and file processing, various
utility programs, and shell, multi-user operation, text processing and
communications.

COURSE PREFIX/SECTION: CIS220-Z40

CREDITS/CONTACT HRS: CIS220-3 credit hours /45 contact hours

TIME/DAY(S): Thursday 6:00 - 9:40

LOCATION: LC903 – 215

INSTRUCTOR: Robert F. Woods

INSTRUCTOR TELEPHONE: 303-306-2355 / robert.woods@ccaurora.edu

OFFICE HOURS: Arranged

SITE EMERGENCY: CCA (303) 360-4727 OR LOWRY (303) 419-5557

COURSE MATERIALS

REQUIRED TEXTS: Guide to UNIX Using Linux Third Edition; Course
Technology

OTHER MATERIALS

OTHER:

Emergency Procedures: The Fire exits and emergency procedures will be
discussed during the first class. When the fire alarm sounds, all students are
expected to exit the building immediately. Since the security of items left behind

is not guaranteed, students should gather all personal belongings before proceeding to the nearest exit.

CCA will provide accommodations for qualified students with disabilities. To request an accommodation, contact the Accessibility Services Office (ASO) Coordinator, Reniece Jones, at your earliest convenience. The ASO is located in the Learning Resource Center (LRC) in the Student Centre building on the CentreTech campus. Arrangements may also be made at the Lowry Campus. You may contact Reniece at (303)361-7395 V/TDD, or e-mail: Reniece.Jones@ccaurora.edu.

SECTION II: COURSE OUTLINE/STUDENT OUTCOMES

INSTRUCTIONAL GOALS: The Instructional Unit has identified the following lifelong/workplace skills that are the foundation for your course of study at CCA: Written and Oral Communication, Critical Inquiry, Interpersonal Responsibility, Numeracy, Technology, and Aesthetic Sensibility. Of these skills, this course will focus on all of them in some form.

GENERAL LEARNING OUTCOMES OF THE COMMUNITY COLLEGE OF AURORA:

Successful students will have shown through in-class exercises and specific course assignments the ability to pursue and retain knowledge, comprehend the various significant levels of acquired knowledge (analyzing and identifying their various components), evaluate the significance of that knowledge, synthesize ideas from multiple sources, and apply what is learned to work and life situations.

GENERAL OUTCOMES:

Successful occupational and technical students will be able to:
  I.
 II.   Perform tasks related to specific jobs or cluster of jobs.
III.   Understand the conceptual framework underlying the acquired technical skills.

   III.   Demonstrate an understanding of personal and work characteristics that contribute to effective job performance.

COURSE SPECIFIC OUTCOMES:

For CIS220, the student will be given the opportunity to:

   I.   History and Development of Unix. The student should:

A.   Explain the importance of the Unix operating system and its relevance to past, present and future operating systems.
B.   Discuss some of the variations of Unix in a historical context.

II.   Initiation Commands. The student should:
A.   Explain the login process.
B.   Explain the contents of /etc/passwd.

III.   The Vi Editor. The student should:
A.   Explain the different modes within VI.
B.   Add, modify, and delete lines and characters using vi

IV.   The Unix File System. The student should:
A.   Explain the hierarchical file structure.
B.   Illustrate proper relative and absolute pathnames.
C.   View file data using cat, pg, more, head and tail.
D.   Create, delete, move, and rename directories.
E.   Create, delete, move, and rename files.
F.   Create symbolic links.

V.   Standard IO and Redirection. The student should:
A.   Explain standard input, standard output, and stderr.
B.   Illustrate redirection using >, >>, 2>, <

VI.   Pipes and Filters. The student should:
A.   Explain how to use a pipe to connect commands.
B.   Illustrate the use of some of the standard Unix filters and their options, including tee and grep

VII.   File Security. The student should:
A.   Explain the security information displayed by the ls –l command.
B.   Demonstrate using chmod to set file permissions
C.   Explain how to use chown to change the owner of a file

VIII.   The Shell. The student should:
A.   Explain the major differences between the Korn, Bourne, and C shells.
B.   Explain how the shell interacts with the rest of the Unix system.
C.   Illustrate how file-name substitution works in the shell.
D.   Show how to create and use shell variables.
E.   Show how to execute shell programs.

IX.   Shell Programming. The student should:
A.   Explain the basic layout of a shell script
B.   Show how to use shell variables from the .profile file.

C.   Explain the execution of sub-shells.

COURSE OUTLINE:

I.	History and Development of Unix.
II.	Initiation Commands.
III.	The Vi Editor.
IV.	The Unix File System.
V.	Standard IO and Redirection.
VI.	Pipes and Filters.
VII.	File Security
VIII.	The Shell.
IX.	Shell Programming.

SECTION III: EVALUATION PROCEDURES

The student will receive the same grade for the lecture, discussion, and components for each course.
OVERALL STRATEGIES: Student progress may be based upon a combination of activities such as examinations, projects, quizzes, handouts …
Timely completion of assignments, prompt attendance, participation in class activities and discussions, and the tested ability to apply learned knowledge to common-life experiences will weigh toward the grade.

CLASS POLICIES:

ATTENDANCE: Attendance will be taken but is not required for completion of the class.

CONDUCT:

1. No plagiarism will be tolerated. Student discussion and group cooperation in completing programs is encouraged, but the program submitted by the student must be his/her own work. If more than one person works on a program and those working on it each turn in a copy of the one program, it will be considered cheating. In the event of cheating, the policies of the school will be followed.
2. Tobacco products are not allowed in the classroom.
3. Inappropriate language will not be tolerated in the classroom.

GRADING / EVALUATION:

1. ASSIGNMENTS: The planned schedule of out of class assignments and examinations is contained in Section IV of this syllabus. Changes, if any, will be announced.

2. GRADING: Each project assignment accepted for grading will normally be graded and returned within one week of the time it was submitted.

3. EXAMINATIONS: There will be 2 examinations as indicated in Section IV of this syllabus. Each exam covers several chapters from the text.

A. Each student's course grade will be determined from the following table.

POINTS	GRADE
1260 – 1400	A
1120 – 1259	B
980 – 1119	C
840 – 979	D
Below 840	F

B. Students may accumulate points from the following sources:

SOURCE	NUMBER	EACH	TOTAL
Examinations	2	200	400
Quizzes	8	50	400
Projects 6B & 7B	2	100	200
Projects	8	50	400

SECTION IV: TENTATIVE COURSE SCHEDULE

   A. Assignments: The planned schedule for readings, examinations and projects is contained in Section IV of the syllabus.

   B. Reading Assignments: The assigned reading in Section IV is to be accomplished during the week identified in the schedule.

C.   The Instructor reserves the right to change the daily teaching schedule to facilitate learning, understanding, and critical thinking. Assignment Due dates and the testing schedule may change with as much advance notice as possible. Students will be required to fulfill all assignments as outlined unless otherwise notified.

Calendar

Week 1	The Essence of UNIX and Linux	Chapter 1
Week 2	Exploring the UNIX/Linux File Systems and File Security Mastering Editors	Chapter 2 & 3 Project 1 due All quizzes available
Week 3	UNIX/Linux File Processing	Chapters 4 & 5 Project 2 & 3 due
Week 4	Advanced File Processing	Chapters 5 Project 4 & 5 due
Week 5	**MIDTERM EXAMINATION**	Chapters 1 – 5
Week 6	Introduction to Shell Script Programming	Chapter 6 Project 6-A due
Week 7	Advanced Shell Programming	Chapter 7 Project 6-B & 7-A due
Week 8	Exploring the UNIX/Linux Utilities	Chapter 8 & 9 Project 7-B due
Week 9	The X Window System	Chapter 11 Project 8 due
Week 10	**FINAL EXAMINATION**	Chapter 6 – 8 & 11

NOTE; NO ASSIGNMENTS WILL BE ACCEPTED AFTER 8/11/2007.
NO EXCEPTIONS WILL BE MADE!!!!!!!!!!!!!!!