COURSE SYLLABUS
COMMUNITY COLLEGE OF AURORA
Unix Shell Programming
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: Unix Shell Programming

COURSE DESCRIPTION CIS 232: Covers simple scripts to automate frequently executed commands followed by an explanation of adding conditional logic, user interaction, loops, menus, traps, and functions to enhance the productivity and effectiveness of the user. In addition, students explore in detail Bourne and Korn shell scripting languages.

COURSE PREFIX/SECTION: CIS232-Z40

PREREQUISITE: CIS220

CREDIT/CONTACT HRS: CIS232-3 Credit hours/45 contact hours

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

LOCATION: LC903-215

INSTRUCTOR: Robert F. Woods

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

OFFICE HOURS: Arranged

SITE MONITOR: 360-472 OR HEAT Center (303) 419-5557

COURSE MATERIALS:
REQUIRED TEXTBOOK: Unix Shell Programming Third Edition by Kochan and Wood

OTHER:

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.

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.

SECTION II: COURSE OUTLINE AND 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: Communication, Critical Inquiry, Intra/Interpersonal Responsibility, Numeracy, Technology, and Aesthetic Perception. Of these skills, this course will focus on: Communication, Critical Inquiry, and Technology.

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 the knowledge, synthesize ideas from multiple sources, and apply what is learned to work and life situations.

Successful occupational and technical students will be able to:

I.   Perform tasks related to specific jobs or clusters of jobs.

II.   Understand the conceptual framework underlying the acquired technical skills.

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

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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.

SPECIFIC COURSE OUTCOMES:
For CIS232, the student will be given the opportunity to:
I. Develop and debug scripts
II. use local and environmental variables, and shell metacharacters in scripts
III. customize system-wide shell initialization files
IV. use regular expression characters with the grep, se, and nawk utilities
V. write sed scripts to perform non-interactive editing tasks
VI. write nawk scripts to manipulate individual fields with a record and to write reports based upon an input file
VII. access and process command-line arguments passed into a script
VIII. develop a USEAGE message to display when a script is invoked incorrectly
IX. use flow control constructs such as branching and looping
X. perform string manipulations and integer arithmetic on shell variables
XI. write a script that uses functions;
XII. write a script that uses a trap to control the behavior of scripts upon receipt of a signal

COURSE OUTLINE:
I. Introduction to Shells and Shell Scripts
II. Writing and Debugging Scripts
III. The Shell Environment
IV. Regular Expressions and grep
V. The sed Editor
VI. The nawk programming language
VII. Conditionals
VIII. Interactive Scripts
IX. Loops
X. Advanced Variables, Parameters, and Argument Lists
XI. Functions
XII. Traps

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. MAKE-UP WORK / LATE WORK: Late assignments will be accepted. While there are not due dates in the class, it is imperative that you do not procrastinate and get behind on projects. **No assignments, test, or projects will be accepted after 08/11/2007. No exceptions will be made.**

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

POINTS	GRADE
1350 -1500	A
1200 – 1349	B
1050 – 1199	C
900 – 1049	D
Below 900	F

B. Students may accumulate points from the following sources:

SOURCE	NUMBER	EACH	TOTAL
Final Project	1	200	200
Projects	13	100	1300

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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. Designs must be typed. Projects not typed will be subject to a 10% penalty.

Week 1	Introduction	Chapter 1
Week 2	Quick Review of the Basics What is the Shell? Tools of the Trade	Chapter 2 & 3 Chapter 4 pgs 54 - 71 Project 1 & 2 due
Week 3	Tools of the Trade And Away We Go Can I Quote You on That?	Chapter 4 pgs 54 – 71 Chapter 5 & 6 Project 3 & 4 due
Week 4	Passing Arguments	Chapter 7 Project 5 due
Week 5	Decisions, Decisions 'Round and 'Round She Goes	Chapter 8 & 9 Project 6 & 7 due
Week 6	Reading and Printing Data Your Environment	Chapter 10 & 11 Project 8 & 9 due
Week 7	More on Parameters	Chapter 12 Project 10 due
Week 8	Loose Ends	Chapter 13 Project 11 due
Week 9	Rolo Revisited	Chapter 14 Project 12 due
Week 10	Interactive and Nonstandard Shell Features **FINAL PROJECT**	Chapter 15 Project 13 due Final Project due

No assignments, test, or projects will be accepted after 08/11/2007.
No exceptions will be made.