UNIX Shell Programming – Course Syllabus
BROOKHAVEN COLLEGE
Spring Semester – January 2013
ITSC-1442-2501

STAFF INFORMATION:

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Course Coordinator: Mike Minihan
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COURSE DESCRIPTION:

This course surveys the C, Bourne, and Korn shells with emphasis on the Bourne shell. It is designed for students who have mastered basic UNIX commands for manipulating files and navigating directories and are ready to begin exploring the power and support available in the Bourne Shell. This course combines coverage of the shell language and working environment with advanced utilities, and provides an overview of the similarities and differences among the three most popular shells.

COURSE OBJECTIVES:

Upon successful completion of ITSC-1442, the student should be able to understand and to:

- Sort files by line or by field
- Use regular expression characters with the `grep` command to find all lines in a file containing specified patterns
- Perform non-interactive editing tasks with the `sed` command
- Write simple `sed` scripts to do complex editing tasks
- Use `awk` variables for storing data
- Employ `awk` programs to manipulate numeric and textual data
- Use built-in `awk` functions
- Write simple `awk` programs to write reports from data files
- Use local and environment variables
- Employ shell metacharacters and redirection
- Perform basic string manipulations and integer arithmetic
- Use aliases and history and exit status to determine if a command succeeded or failed
- Handle flow-control constructs (branching and loops)
- Customize the `.cshrc` and `.login` start-up scripts
- Customize the search path and prompt
- Devise a Bourne shell script that interacts with users, accesses command-line arguments, returns an exit status, and makes decisions based on numeric comparison, string comparison, or command exit status
Teaching/Learning Methods:

- Lectures and Discussions
- Reading Assignments
- Hands-On Lab Exercises
- Tests

COURSE MATERIAL:

UNIX Shell Programming – Stephen G. Kochan & Patrick Wood
ISBN: 0672324903

REQUIRED COURSE WORK:

In order to complete this course successfully, you are required to:

1. Attend ALL the course orientation sessions.
2. Read and study the appropriate textbook/handout reading assignments, lecture notes, and computer assignments as directed.
3. Complete lab all exercises that are assigned each lab period (10 @ 10 points each).
4. Complete two tests (midterm & a final exam) in class (100 points each).

STUDENT EVALUATION:

1. Exams and Labs

There are 3 test exams and a final exam, each worth 100 points. All exams, WILL BE taken in class.

There are 10 lab exercises that will be assigned, each worth 10 points. Each section assigned will be due (understood) on test week for that section era. Each examination MUST be completed by the deadlines established in the course schedule. Any student who does not complete an exam during the test day MUST NOTIFY PROFESSOR DURING THAT TEST PERIOD (by phone or email) for conference. Failure to do this will result in a zero (0) for that test grade!!! This WILL NOT be negotiated!!!

2. Academic Standards

<table>
<thead>
<tr>
<th>Grade Interpretation</th>
<th>Grade Point Value</th>
<th>Grading Policy</th>
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</thead>
<tbody>
<tr>
<td>A Excellent</td>
<td>4 Points</td>
<td>A - 360 to 400</td>
</tr>
<tr>
<td>B Good</td>
<td>3 Points</td>
<td>B - 320 to 359</td>
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<tr>
<td>C Average</td>
<td>2 Points</td>
<td>C - 280 to 319</td>
</tr>
<tr>
<td>D Poor</td>
<td>1 Point</td>
<td>D - 240 to 279</td>
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<tr>
<td>F Failed</td>
<td>0 Points</td>
<td>F - 0 to 239</td>
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<tr>
<td>W Withdrawn</td>
<td>Not Computed</td>
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ACADEMIC DISHONESTY:

All course work in this class is undertaken with the understanding that academic honesty is the only acceptable behavior at Brookhaven. Further, it is understood that the instructor sets the standards of academic honesty in the classroom, determines when those standards have been violated, and determines the consequences of that behavior by the student. Practices such as cheating, collusion, unauthorized collaboration, fabrication, or plagiarism will not be tolerated.

NOTIFICATION OF ABSENCE DUE TO RELIGIOUS HOLY DAY(S):

Students desiring to observe a religious holiday which will result in a class absence must notify the instructor in writing no later than the 15th calendar day after the start of the semester. The student is required to complete any work missed with a reasonable period of time.

AMERICANS WITH DISABILITIES POLICY STATEMENT:

If you feel the need for an academic adjustment (such as help with taking notes or special seating arrangements) due to any type of physical disability or learning difference, please talk with your instructor before the end of the second week of classes. You may also contact Special Services at 972-860-4847 for advisement and counseling.

BROOKHAVEN COLLEGE POLICY:

1. Any student who is unable to complete this course must withdraw from it by the college official drop date. Withdrawing from a course is a formal procedure that the student must initiate. The student may do this in Admissions or in Counseling. If the student stops attending and does not withdraw, he or she will receive a performance grade, usually an "F".

2. No food, drink or smoking will be allowed in the classrooms or labs.

FINALLY...

1. Every student is responsible for handouts that are passed out during class periods. If you are going to be absent, have somebody pick up a copy for you. **I DO NOT** carry extra handouts from class to class. Every attempt will be made to get any and all handouts put on the course web-page.

2. The instructor reserves the right to modify the course requirements, assignments, grading procedures, and other related policies as circumstances dictate.

3. All students in this course are expected to abide by the rules and regulations as set forth in both the DCCCD Student Code of Conduct and the DCCCD Rules for Responsible Computing. Failure to comply may result in legal and/or disciplinary action.
Receiving Your Grades

End-of-semester grades will not be mailed to you by the college. To receive your grades you have two options: through the Internet or through the Telephone Touch Tone System. Depending on your choice use the following directions:

Internet Access to Grades:

1. Go to the Dallas County Community College website (http://www.dcccd.edll)
2. Next, look at the Online Services heading.
3. Under the Online Services heading click on eConnect-Register, Pay, Check Grades.
4. You are now on the student menu.
5. Next click on My Personal Information (this will expand the menu)
6. Now click on My Grades
7. Enter your seven digit student ID (not your social security #)
8. Enter your password or if it is your first time to use the system enter your date of birth. (Example: Feb 16, 1965 021665)
9. Now select the grade type you wish to review (CR-Credit Grades) and click on submit.
10. Grades start with "oldest" term-now find yours.

Withdrawal Policy (with drop date)

If you are unable to complete this course, it is your responsibility to withdraw formally. The withdrawal request must be received in the Registrar’s Office by (semester’s drop date). Failure to do so will result in your receiving a performance grade, usually an “F.” If you drop a class or withdraw from the college before the official drop/withdrawal deadline, you will receive a “W” (Withdraw) in each class dropped.

STOP BEFORE YOU DROP

For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than six courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated six non-exempt drops, you cannot drop any other courses with a “W.” Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: https://www1.dcccd.edu/coursedrops