

### BOWIE STATE UNIVERSITY Department of Computer Science CTEC 222 UNIX Operating Systems (3 Credits) Spring 2008

**ADA Statement:** Students who have a disability and want accommodations should report to Disability Support Services immediately, located in Room 311 of the Center for Learning and Technology (301-860-3292).

**EPE Statement:** Please take your **English Proficiency Examination** as early as possible! After completing ENGL 101 and ENGL 103, students must take and successfully pass the Bowie State University English Proficiency Examination. Transfer students who completed their English composition requirements at another university should take the English Proficiency Examination during their first semester of enrollment at the University.

| Instructor:             | Dr. Sharad Sharma                               |
|-------------------------|---|
| Classroom:              | Computer Science Building, Room 313             |
| <b>Class Hours</b> :    | Wednesday: 4:55 – 7:25 PM                       |
| <b>Office Hours:</b>    | Wednesday 2:55 – 4:55 PM, Tuesday 3:30 – 4:30PM |
|                         | Other Times by Appointment                      |
| <b>Office Location:</b> | Computer Science Building, Room 317             |
| Email:                  | ssharma@bowiestate.edu                          |
| Phone:                  | 2-4502 (in campus)                              |
| Course Website:         | http://www.cs.bowiestate.edu/~sharad/unix/      |
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**REQUIRED TEXT:** UNIX Programming for Programmers and Users, Graham Glass, King Ables, 3<sup>rd</sup> Edition, Prentice-Hall.

## **RECOMMENDED READING LIST:**

- "The UNIX Programming Environment" by Kernighan and Pike, Prentice Hall, ISBN 0-13-937681-X
- Todd Meadors, "Linux Shell Script Programming", Thomson Course Technologies, 2003, ISBN 0-619-15920-0
- Syed Mansoor Sarwar, Robert Koretsky, and Syed Aqeel Sarwar, "Unix: The Textbook", Addison-Wesley Pub Co; ISBN: 0201612607
- Keith Haviland, Dina Gray, and Ben Salama, "UNIX System Programming" Addison-Wesley Pub Co; ISBN: 0201877589; 2st edition (December 9, 1998)
- Stephen G. Kochan and Patrick H. Wood "UNIX Shell Programming", Hayden Books, 1990.
- Marty Poniatowski, "UNIX User's Handbook, Second Edition", Prentice Hall PTR, 2002.

## CATALOG DESCRIPTION:

This course is an introduction to the UNIX operating system. UNIX shell programming is covered in detail, as are UNIX kernel and utilities; regular expressions; the commands:

sed, tr, grep, sort, uniq, shift, test; the constructs: if elif, case, for, while, unitl, getopts, &&, ||, development of shell programs to solve system problems; and the UNIX environment, HOME, PATH, etc.

## **Course Objectives:**

Upon successful completion of this course, the students will

- 1. Have a familiarity with basic UNIX commands and the facility to combine them to accomplish system tasks.
- 2. Have the ability to write elementary scripts to automate tasks.

## **TEACHING MODE:**

The primary teaching mode will be lecture-discussion, problem solving, and questionanswer approach. The lectures will be supplemented by some projects in computer labs.

## **EVALUATION METHOD:**

Final semester grade will be determined by the average of the student performance on the homework, in-class projects, projects, midterm, and the final exam as follows:

| ,                    |                                    |                |
|----------------------|------------------------------------|----------------|
|                      | In-class Quiz & Homework           | 20%            |
|                      | Projects                           | 20%            |
|                      | Midterm                            | 20%            |
|                      | Final                              | 30%            |
|                      | Class attendance and participation | 10%            |
| Letter Grades will b | be assigned according to:          |                |
|                      | 90 - 100                           | $= \mathbf{A}$ |
| :                    | 80 - 89                            | = B            |
| ,                    | 70 - 79                            | = C            |
|                      | 60 - 69                            | = D            |
| 1                    | below 60                           | = F            |

#### **IMPORTANT DATES AND TEST SCHEDULE:** (right click and open hyperlink) http://www.bowiestate.edu/about/events.asp

#### **IMPORTANT TELEPHONE NUMBERS:**

| Dept of Comp Sc (Secretary):        | (301) 860-3960 |
|-------------------------------------|----------------|
| Dept of Comp Sc (Fax):              | (301) 860-3979 |
| Bowie State University (Main):      | (301) 860-4000 |
| Inclement Weather related closures: | (301) 860-4000 |

#### **IMPORTANT!**

• Class attendance is mandatory at Bowie State University. This policy will be enforced. After six (6) absences from a daytime course or two absences (2) from an

evening course, the matter will be referred to the department chair. It is of the utmost importance that you attend **every** class!

- Expect a quiz or test every week. The quiz time will run from the start of class for 15 minutes. Therefore, if your are 15 minutes or more late, you will miss the quiz.
- All homework and assignments are to be turned in *on or before the due date*, even if class is cancelled for *any* reason or you are not able to attend class. Assignments may be submitted in class, slipped under my office door, or given to me during my office hours. It is each individual student's responsibility to submit homework and assignments on time.
- There will be **no make-up** for missed homework, assignments, or quizzes. Makeup of exams will be allowed *only* if the absence is validated by a formal documents (e.g., from the hospital) and a prior notice if it can be notified before the class.

## Policy on Cell Phones, etc.

The ringers of cell phones, pagers and any other electronic devices must be turned OFF or set to vibrate during class time. Only calls of an urgent or emergency nature should be taken and you should step outside the classroom to do so. If you do not observe this policy, you may be asked to leave the class for that day and an unexcused absence will be incurred.

# Some useful links:

Bash Tutorial: http://www.faqs.org/docs/bashman/bashref\_4.html#SEC4

vi Editor Tutorial: http://math.la.asu.edu/vi\_tutorial/vi3.html

emacs Tutorial: http://jeremy.zawodny.com/emacs/emacs.html