LeMoyne-Owen College  
Division of Natural and Mathematical Sciences  
Introduction to UNIX, ITEC310  
Summer 2013

Instructor: Jin Zhang, Ph.D.  
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Email Address: jinz03@gmail.com  
URL: http://cs.loc.edu/~jzhang

Credit Hours: 3  
Prerequisites: ITEC 216 or permission of instructor  
Class Meeting: Tues/Thurs 8:00 AM to 10:30 AM.

Syllabus


Course Description:  
This course covers the use of UNIX operating system as a program development environment. Topics include UNIX commands, text editor, system calls, file systems, shell scripting, and programming tools.

College Graduate Competencies:  
The two college graduate competencies (CGC) that are directly addressed in Introduction to UNIX are:  
1. Think creatively, critically, logically, and analytically using both quantitative and qualitative methods for problem solving;  
8. Maintain levels of literacy that allow them to understand the impact of science and technology on individuals, society, and the environment.
**General Education/CORE II Competency Levels:**
The college graduate competencies are developed specifically for this course through major area competency levels (MAC). By the end of this course, students should have attained proficiency in the following major area competencies:

1. To demonstrate an ability to think creatively, critically, logically, and analytically using both quantitative and qualitative methods for solving problems (CGC#1).
2. To take full advantage of the underlying power of the Unix operating system through the process of building shell scripts, debugging them, and understanding how they work within the shell’s environment (CGC#8).

**Course Objectives:**
The identified major area competencies focus on how students enhance their logical understanding and critical comprehension of Introduction to UNIX. Therefore, students are expected to show proficiency in the following:

1. Demonstrate understanding of the basics of UNIX system.
2. Explain clearly to other students what is the shell and its responsibilities.
3. Demonstrate understanding of shell programs to critically and logically use these programs to solve problems:
   a. Be able to use regular expressions to specify patterns to be matched.
   b. Be able to create a shell program and apply that program to real life problems.
   c. Be able to process command-line argument passed to shell programs.

**Attendance Policy:** In accordance with college policy, classroom attendance is required. The following standard will be applied:

1. If unexcused absences total 15% of the regularly scheduled class meetings, the instructor has the authority to lower the final grade by one letter.
2. If unexcused absences total 20% of the regularly scheduled class meetings, the instructor has the authority to give a failing grade.
3. Five classes of tardiness—arrival to class five minutes after class has begun—will equal one unexcused absence.

**Special Notice on Attendance Policy**
The U.S Department of Education policies regarding financial aid have become strict on student attendance. It is therefore essential that LeMoyne-Owen College enforce attendance standards in order not to jeopardize the aid for all students. The following policies and procedures will therefore be enforced beginning in January 2013. Students who do not meet the attendance standards, in line with federal requirements, will not receive refund checks and part of their financial aid award may be returned to the Department of Education. The WF grade will count as an F on the transcript for grade point average (GPA) and hours attempted purposes.
Attendance Policy and Procedures

1. Students who never attend class (No Shows) during the first fourteen days of class will be purged from the class roster. There will be no academic penalty or impact on the GPA or hours attempted, but if it reduces the hours of enrollment to part-time status, it may have financial aid implications.

2. Students who fail to meet the academic attendance standards and virtually have left a class at the mid-semester mark will receive a grade of WF. These are students in regular 3 credit hour classes who have 8 unexcused absences in a MWF class and/or 6 unexcused absences in a TTH class, and have essentially left the class as of mid-semester. This means that for MWF classes, they have not been in the class 4 or more class meetings in a row ending at the report date, and for TTH classes they have missed 3 or more class days in a row, ending at the report date.

Technology Use: LeMoyne-Owen College is committed to enhancing student learning through the use of a variety of applicable technologies. In this course, students will use and be exposed to UNIX system.

Demeanor: Suitable demeanor, posture and attire are required. For guidelines and the dress code, please refer to the 2011/2012 Student Handbook (8-9; 13).

Classroom Policies and Procedures:
The classroom learning experience provides opportunities for faculty and students to engage in interactive exchanges of course content. To facilitate this exchange, the following guidelines are provided:

1. Because each class session covers vital material and information, it is important that students arrive on time to each class session.

2. In order to enhance students’ performance and confidence in acquiring the material, it is critical that students come to each class session prepared. This includes bringing to class required texts, supplemental materials, and assigned work, which is provided on the course outline.

3. In order to limit unnecessary distractions which would deter learning, cell phones, multi-media devices, and laptops are required to be turned off or on vibrate when class is in session, except by permission of the faculty.

Faculty reserve the right to apply penalties for noncompliance to either or all of the above guidelines.
Assignments and Submission Requirements:
All assignments should be turned in on time through e-mail by the due date. There will be no credit for delayed submissions. Duplication of assignment submissions will not be permitted. Duplicated assignment submissions as well as the original will be assigned a grade of "F."

Three announced quizzes, four assignments, two Written Tests, and Final Written Comprehensive Test will be given. There are no make-up tests except for a valid document from a doctor; however, a note from home is not acceptable.

Policies Related to Students with Disabilities:
If you need course adaptations or accommodations because of a disability, if you have emergency medical information to share, or if you need special arrangements in case the building must be evacuated, please make an appointment with Jean Saulsberry, Director of Student Development, as soon as possible at (901) 435-1727. The Student Development Office is located in the Alma C. Hanson Student Center, Room 208.

Student Performance Evaluation and Grading Scale:

| The course grade will be calculated on the following distribution: | Grades will be recorded in numerical form until the final averages are determined at the end of the semester.  
Grading Scale will be |
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<tbody>
<tr>
<td>Assignments 20%</td>
<td>90 to 100 A, 80 to 89 B, 70 to 79 C, 60 to 69 D, Others F.</td>
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<tr>
<td>Class participation 5%</td>
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<td>Quizzes 15%</td>
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<tr>
<td>Mid-term Tests 30%</td>
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<tr>
<td>Final Written Exam 30%</td>
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LeMoyne-Owen College Graduate Competencies (CGC)

LeMoyne-Owen College graduates should be able to:

1. Think creatively, critically, logically, and analytically using both quantitative and qualitative methods for problem solving;
2. Communicate effectively (listen, speak, read, and write) on formal and informal levels;
3. Distinguish, clarify, and refine personal values for the attainment of richer self-perception and relate those values to the value system of others;
4. Appreciate, understand, and know the foundations of the Afrocentric perspective;
5. Appreciate, understand, and know the foundations of diverse cultures in the context of a global community;
6. Appreciate, understand, know and pursue the principles, methods and subject matter that underlie the major discipline(s);
7. Accept social responsibility and provide service to humankind;
8. Maintain levels of literacy that allow them to understand the impact of science and technology on individuals, society, and the environment;
9. Attain motivational, personal management, interpersonal skills, professional development and research experience, as well as resourcefulness that will form the basis for a career and/or further educational experiences;
10. Attain critical skills, frame of reference, and understanding needed to appreciate and discriminate between artistic achievements.
The Conceptual Framework Model
Theme: Teacher as a Facilitator of Transformative Processes

LeMoyne-Owen College Division of Education

Clinical Practice

Exit

Professional, Major/Concentration

Benchmark 2 & 3 Teacher Candidate

General Education (Core II & Supplemental) 10 College Competencies

Developmental Studies (If Needed)

Developmental Studies (If Needed)

Benchmark 1

Teacher Education Pre-Candidate

Student

 Benchmark

General Education (Core II & Supplemental) 10 College Competencies

Exit

Professional, Major/Concentration

Benchmark

Completion of Major Capstone

Exit

Benchmark

Teacher Candidate

ITEC350 Database Programming
# Introduction to UNIX
## Course Outline (tentative)

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Chapters</th>
<th>Topics/Readings</th>
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<tbody>
<tr>
<td>1</td>
<td>1, 2</td>
<td>Introduction and the Basics of UNIX</td>
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<tr>
<td></td>
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<td><strong>Quiz 1</strong></td>
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<td>2</td>
<td>3</td>
<td><em>the Shell</em></td>
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<td></td>
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<td><strong>Quiz 2</strong></td>
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<td>3</td>
<td>4</td>
<td>Tools of the Trade</td>
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<td>4</td>
<td>5</td>
<td>Variables</td>
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<td>5</td>
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<td><strong>Review and Midterm Exam</strong></td>
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<td>6</td>
<td>7</td>
<td>Passing Arguments</td>
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<td>7</td>
<td>8</td>
<td>Decisions</td>
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<td><strong>Quiz 3</strong></td>
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<td>8</td>
<td>11</td>
<td>Environment</td>
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<td>9</td>
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<td><strong>Comprehensive Review</strong></td>
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<tr>
<td>10</td>
<td></td>
<td><strong>Final Comprehensive Exam</strong></td>
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Instructor reserves the right to add or subtract assignments or assessments.