

# SU DEPARTMENT OF COMPUTER SCIENCE SYLLABUS

## COSC 350 System Software

Prerequisite: Computer Science II (COS 220) and Microcomputer Organization (COS 250) with grades of C or better.

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3rd edition, 2013

Beginning Linux Programming, by Matthew and Stones; Wiley Publishing Inc, 4 2008

### Topics:

The UNIX/Linux Operating System Basics

UNIX/Linux basic commands, login scripts and environment set up, C programming environment, introduction to basic shell scripts

Working with files

File and directory structure, low level file access, standard I/O library, formatted input and output.

Process

Basic concepts of Linux process and process attributes, process control using fork, exec, wait, process relationship.

Signals

Concept of signals, usage of signal between processes, process functions

Threads

Thread concepts, thread creation, termination, synchronization, thread control, thread attributes

Interprocess Communication

Basic concepts of process communication

Grade: Test 120 %, Test 20 %, Final 80 % Lab/Mini Test 15/5%. Your final grade is based on the standard formula

A: 90 Total\_Average\_score

B: 80 Total\_Average\_score < 90

C: 70 Total\_Average\_score < 80

D: 60 Total\_Average\_score < 70

F: Total\_Average\_score < 60

#### Exam Policy:

There will be an announcement one week before each exam (midtest or final exam).

There will be no make-ups or rescheduling of exams for individual cases (except emergency cases with evidence).

#### Lab policy:

Lab material will be provided at the beginning of each lab class.

Each student is required to attend a lab session each week and start working on new lab. Each lab must be done by the beginning of the next lab class. Instructor will check and collect the copy of each student's work during the lab hour. Each student must be ready to show his/her works at the beginning of each lab class.

Students are expected to work independently on each lab. I have no problem with students discussing assignments to help understand a problem, learn how to use language features or debug a program. However, copying code is strictly prohibited. Copying code from another student or any other source (e.g., a web site) is considered plagiarism and will be prosecuted under the Code of Student Conduct at Salisbury University. If two students have identical or similar work, both will be given a failing grade.

Late lab work will not be accepted without special permission.

**Attendance** Each student is expected to be present each lecture. Attendance will be checked each class. If a student misses lectures more than (2 weeks) without any reason with evidence, he/she will lose 3% from the total average score. If a class must be missed, how students are responsible for all material, assignments, and announcements made during class.