INTRODUCTION TO OPERATING SYSTEMS
(1:30 – 2:45 pm, Tues, Thurs, CEC0117)

Instructor: S.K. Dhall, #231DEH, TEL: 325-4042

Office Hrs: 11:00 am – 12:30 pm Tuesday, Thursday

Teaching Assistant: To be assigned
Office Hours: To be determined

William Stallings, Prentice Hall.

2. The LINUX Programming Interface by Michael Kerrisk – No Starch Press (Recommended)

Course Outline: Following topics will be covered:
Operating System Structure and Overview; Process management;
concurrency: Mutual exclusion and synchronization, deadlock and starvation;
memory management, virtual memory; process scheduling; file and secondary
storage management; computer protection and security. Other topics may be
considered as time permits.

Course Objective: The main objective of the course is to gain understanding of the concepts in
the design of Operating Systems. As a bye-product we will achieve the
following outcomes:
(a) An ability to design, implement, and evaluate a computer-based
    system, process, component, or program to meet desired needs
(b) An understanding of the issues in computer security.
(c) An ability to apply mathematical foundations, algorithmic
    principles, and computer science theory in the modeling and design
    of computer-based systems in a way that demonstrates
    comprehension of the tradeoffs involved in design choices.

Homework: Homework will consist of problems and programming assignments. All
homework should be turned in electronically by the due date and time.
Late work will be subject to penalty of 10% per day. Homework will
not be accepted if it is more than a week late. The homework must be
typed. Illegible work will not be accepted. Homework will count for
30% towards the final grade.

Examinations: In addition to the FINAL EXAMINATION as scheduled according to the
University Calendar (on 12/12/2014), there will be two other examinations.
The actual dates will be announced about a week before each exam. Each of
these exams will count for 20% of your grade. The final exam will count
for 30% of your grade. ALL EXAMS MUST BE TAKEN AS
SCHEDULED. NO EXAM WILL BE GIVEN TO MAKE-UP THE
MISSED ONES, EXCEPT IN CASES OF SICKNESS OR FAMILY
EMERGENCY, DULY SUPPORTED BY DOCTOR’S
CERTIFICATE. PROBLEMS WITH CAR OR ALARM CLOCKS WILL NOT BE CONSIDERED AS A VALID EXCUSE. PLEASE, DO NOT ASK FOR ANY MAKE-UP EXAM FOR FRIVOLOUS REASONS.

Grading: In order to get a passing grade in the course, a student must secure passing grades both in the homework and tests. Passing grade for each of these categories is 50% of the total marks. A student not securing a passing grade in either one of the two categories will be assigned a grade of F. The overall grade will be determined as follows:

- 90% or above – A
- 80% or above and below 90% - B
- 70% or above and below 80% - C
- 60% or above and below 70% - D

Below 50% in either homework or in the tests or below 60% overall – F

Cooperation: A good way to learn the material is to explain it to someone else, so student-student discussion is encouraged. Student conversation is a valuable tool in suggesting different approaches to problem solution. However, since a grade must be assigned to each student that reflects the individual's mastery of the subject, and not the communication talent, the work you turn in must be your own. COLLABORATION IS NOT ALLOWED, AND WHEN DISCOVERED, WILL BE REPORTED TO THE APPROPRIATE AUTHORITIES TO BE DEALT WITH ACCORDING TO THE UNIVERSITY REGULATIONS.

ANY STUDENT IN THIS COURSE WHO HAS A DISABILITY THAT MAY PREVENT HIM/her FROM FULLY DEMONSTRATING HIS/her ABILITIES SHOULD CONTACT ME PERSONALLY AS SOON AS POSSIBLE SO WE CAN DISCUSS ACCOMMODATIONS NECESSARY TO ENSURE FULL PARTICIPATION AND FACILITATE YOUR EDUCATIONAL OPPORTUNITIES.

The College of Engineering utilizes student ratings as one of the bases for evaluating the teaching effectiveness of each of its faculty members. The results of these forms are important data used in the process of awarding tenure, making promotions, and giving salary increases. In addition, the faculty uses these forms to improve their own teaching effectiveness. The original request for the use of these forms came from students, and it is students who eventually benefit most from their use. Please take this task seriously and respond as honestly and precisely as possible, both to the machine-scored items and to the open-ended questions.

Religious observance: It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays. If you need to observe any religious holiday, PLEASE LET ME KNOW IN ADVANCE.
**Adjustments for Pregnancy/Childbirth Related Issues:** Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see [www.ou.edu/content/eoo/pregnancyfaqs.html](http://www.ou.edu/content/eoo/pregnancyfaqs.html) for commonly asked questions.

**Title IX Resources:** For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on-call 24.7, counseling services, mutual no contact orders, scheduling adjustments and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office 405-325-2215 (8-5) or the Sexual Assault Response Team 405-615-0013 (24.7) to learn more or to report an incident.