CSCI 530W (2015 Fall Syllabus - Tentative) – Operating Systems (02W 82545)

Weekly Class Meetings: **Meets 8/31/2015 through 12/18/2015** **100% Web Based Class** **Prerequisites: Lvl G CSCI 515 Min Grade B or C515 075 or W515 0 and Lvl G CSCI 516 Min Grade B or C516 075 or W516 0**	**Instructor Office Hours (Jour210):** **Wed: 3:15-5:00PM, Thurs: 3:15-5:00PM and Mon-Fri 10:00am-8:00pm (by appt).**

INSTRUCTOR:
Dr. Tanik
Assistant Professor, Department of Computer Science
Texas A&M University - Commerce
Instructor Office: JOUR210
e-mail: John. Tanik@tamuc.edu
Office Phone: 903-886-5419

TEXTBOOK:
Operating Systems Internals and Design Principles - 8th Edition
by William Stallings Prentice-Hall Inc., 2014, ISBN-13: 978-0133805918 ISBN-10: 0133805913 Edition: 8th

COURSE DESCRIPTION:
Operating Systems (OS). A study of operating systems with emphasis on a multiprogramming environment; concentrates on principles involved in resource management; topics such as job scheduling and memory management are also studied. Credit hours: 3.

STUDENT LEARNING OUTCOMES:
(SLO430.1) Students will be able to identify the basic components, and functions of OS.
(SLO430.2) Students will be able to identify modern memory management techniques.
(SLO430.3) Students will be able to identify components of multiprogramming OS.
(SLO430.4) Students will be able to identify processes, threads, and their management by the OS.
(SLO430.5) Students will be able to identify concurrent programming techniques and job scheduling.
(SLO430.6) Students will learn about some commercially available modern OS.

EXAMS & GRADING:
Attendance, class-participation & quizzes 10%
Homework Assignments 20%
Project 20%
Midterm Exam 20%
Final Exam (Comprehensive of all the material covered) 30%

COURSE OUTLINE/CONTENT:
Part One: Background (Chapters 1, 2)

Chapter 1. Computer system overview (Week 1 & 2)

Parts of Chapter 2. Operating system overview (Week 2 & 3)

Part Two: Processes (Chapters 3, 4, 5, 6)

Parts of Chapter 3. Process description and control (Week 4 & 5)

Parts of Chapter 4. Threads (Week 5 & 6)

Parts of Chapter 5. Concurrency I: Mutual exclusion (Week 7 & 8)

Midterm Exam/Review: (Week 8&9)

Parts of Chapter 6. Concurrency II: Deadlock and starvation (Week 10 & 11)

Part Three: Memory (Chapters 7, 8)

Parts of Chapter 7. Memory management (Week 11 & 12)

Parts of Chapter 8. Virtual memory (Week 13 & 14)

Part Four: Scheduling (Chapters 9, 10)

Parts of Chapter 9. Uniprocessor scheduling (Week 14 & 15)

The last week will be used for review (Week 16)

ONLINE COURSE REQUIREMENTS:
Study: To plan a minimum of three hours of outside preparation for each hour of class is a safe time allocation for successfully completing the course.
Assignments: Project work will include industry best practices. There will be regularly assigned homework problems. Assignments will be posted online on a website dedicated to CSCI 530. The eCollege system (https://secure.ecollege.com/tamuc) will be utilized for announcements and all student official submissions. The instructor may add other necessary work to help graduate students prepare for graduate level work or jobs.
Online management: It is the student's responsibility to login and check the eCollege course shell/site daily for announcements (and required MWF), assignments and course-related content. It is very important that students follow the instructions carefully on the assignments.
Late work: It is the student's responsibility to have all assignments ready on time by the given due date. Assignments turned in late (after 1159pm the day it is due) will not count (and receive an automatic 0%).
Exams: Two exams will be given, one midterm exam and one final exam. The exams will test assigned readings and material covered in class, including project work.
Attendance: Student participation will be checked with routine work given weekly.
Quizzes: Quizzes may be given as needed.

ACADEMIC ETHICS:
"All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (See Student's Guide Handbook, Policies and Procedures, Conduct). Ethics include the issue of plagiarism, and copying parts or whole of assignments, quizzes and exams is just as serious as any other type of plagiarism. If you are caught sharing or using other people's work, you will receive warning on the first instance and you might receive a 0 grade. A subsequent instance might result in receiving an F grade for the course, and possible disciplinary proceedings. The student who shares as well as the one who copies will both receive a 0.

ATTENDANCE POLICY:
Student participation will be graded by the level of class participation and attendance. Students are expected to attend every class. The student may fail the course if the attendance is below a certain percentage. If a student is absent from class on the due date of any assignment, they are expected to make alternative arrangements to assure that the assignment is turned in ON TIME. Any student wishing to withdraw from the course must do so officially as outlined in the class schedule. THE INSTRUCTOR CANNOT DROP OR WITHDRAW ANY STUDENT.

COURSE REQUIREMENT DEADLINES:
Credit will be given for ONLY those exam(s), program(s), and/or project(s) turned in no later than the deadline(s) as announced by the instructor of this class unless prior arrangement has been made with the instructor. Late assignments will be penalized, and the instructor may not accept late assignments after a specified period.

METHOD OF EVALUATION (Tentative):
Final average Letter grade
90 – 100 A
80 – 89.99 B
70 – 79.99 C
60 – 69.99 D
Below 60 F

STUDENTS WITH DISABILITIES REQUIRING ASSISTANCE:
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive
civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of
their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library
Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

UNIVERSITY RULES AND PROCEDURES can be accessed at
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/
Section 13 is about Students (Academic).

Smoke, Vapor & Tobacco Free Environment:
University Procedure 34.05.99.R1 now prohibits the use of vapor/electronic cigarettes, smokeless tobacco, snuff and chewing tobacco inside and adjacent to any building owned, leased, or operated by A&M – Commerc