COP 4600 – Introduction To Operating Systems
Summer 2011 - Syllabus

Course Prerequisites: COP 3503, COP 3402, Passed Foundation Exam (COT 3906)
Class Meets: Tuesday and Thursday from 10:00 am – 11:50 am in MAP 359

Instructor: Dr. Mark Llewellyn

Office: HEC 236

Office Hours: Monday 2:00-4:00pm
Tuesday: 12:00 – 2:00pm
Wednesday: 2:00 – 4:00pm

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Course Web Site: www.cs.ucf.edu/courses/cop4600/sum2011

Course Description:
This course will introduce you to modern operating systems. We'll deal with the fundamental concepts and algorithms used in the design of existing operating systems kernels. You'll gain an understanding of how operating system abstractions are implemented on conventional hardware. You'll also learn how to apply the main evaluation models used to evaluate a system. We'll also detail how to properly synchronize multi-threaded communicating processes using synchronization primitives such as semaphores and monitors. We'll cover system calls, processes, threading, CPU scheduling, memory management, and security issues. We'll also deal with the terminology, hardware, and software associated with operating system components and structures.

Texts: The following text will be referenced for this course:
Operating System Concepts, Essentials, Silberschatz, Galvin, Gagne, 2011, John Wiley & Sons, ISBN: 978-0-470-88920-6.

Grading:
Three exams will be given, two regular exams and a final exam (comprehensive). Exams are given once – be there as there are no dropped test scores. There will be four to six homework assignments. The homework assignments are to be individual efforts. You must score at least 60% on the final exam to pass the course.

Homework assignments (total) 25%
2 Regular Exams (25% each).. 50%
Final Exam (Thursday August 4th - regular class time) 25%
Grading Scale:
Plus/minus grading will be used in this course.

90-100 = A, 88-90 = A-, 86-88 = B+, 80-86 = B, 78-80 = B-, 76-78 = C+,
70-76 = C, 68-70 = C-, 66-68 = D+, 60-66 = D, 58-60 = D-, <58 = F

Some Important Dates:
      Last Day to Withdraw: Friday June 24th
      Final Exam: Thursday August 4th - regular class time

Topics To Be Covered:

1. Introduction to Operating Systems

2. Hardware Components

3. User Interface

4. Resource Management

5. Processes and Threading

6. CPU Scheduling

7. Process Synchronization

8. Memory Management

9. File System

10. Security

This is a general list of topics only and is subject to the needs of the class. It will be altered without notice, but will generally follow the same progression. At the end of each class I will tell you what we will be discussing during the next class period. On-line notes will supplement the text in many areas.