INDIANA TECH
COURSE SYLLABUS
Spring 2016

CS3200 Operating Systems
Prerequisite: CS2100. Operating system design and implementation issues. Multiprogramming, multiprocessing, scheduling, memory management, security. Scheduled and Unscheduled laboratory.
(3 plus 0) 3 Credit Hours

TEXT: Principles of Modern Operating Systems 2nd Ed. Garrido, Schlesinger & Hoganson; Jones and Bartlett; 2013

TESTING:
All examinations will be taken at announced times. No "make-up" exams will be given. If a student has a reason for missing an exam that the instructor considers valid and the student notifies the instructor **before** the announced date, special accommodation might be made.

PROJECT:
The project will involve systems level programming on the Pep8 CLI system. Completion date of the project depends upon the progress students are making. Groups of three will be formed by students' choice of partners unless that becomes a problem. In that case I will divide the class into groups. Should the number of students in the class fail to be a multiple of 3, I will choose a method for grouping.

Further additions to the system may be added during the term.

GRADING:
Grades will be based on the following:

3	1 hour exams	@ 100 pts	300 pts
1	Term Project in several sections		200 pts
1	final exam	@ 200 pts	200 pts
Total Possible			700 pts

Occasional homework may be added at the discretion of the instructor.

Letter grades will be assigned according to the following scale:

A >= 93%, A- >= 89%, B+ >= 86%, B >= 83%, B- >= 79%,
C+ >= 76%, C >= 73%, C- >= 69%, D >= 60%, F < 60%

ABSENSES:
If a student must be absent due to illness, athletic events, or other school events, notify me as soon as possible (in the case of school events you should be able to do that well in advance of the event, in the case of illness you should email or text me as soon as you know that you will not be able to attend). It will be the student's responsibility to get the notes/assignments for missed classes from members of his/her group.

OFFICE HOURS:

OFFICE:	HOURS:	PHONE:	E-MAIL:
Z108C	see below	mobile 260-402-3782	iitmarty@mac.com
(back corner)			iitmarty@gmail.com
			MFM02@indianatech.edu
			(undependable)

Feel free to call, text, or email.

Schedule: xx indicates times when I will usually be in my office

	Mon	Tue	Wed	Thu	Fri
9:30		CS3200		CS3200	
11:00		xx		xx	
12:30		CS3700		CS3700	
2:00		CS4800			
3:00		xx			
3:30		NET4000			

Appointments are available if these hours are not convenient.
Feel free to text, call or e-mail me with questions. I monitor my texts and e-mail fairly closely. If I don't recognize a number I may not answer the phone. Text or email w/ name, number and course.

BIBLIOGRAPHY:

Operating Systems, 5/E; William Stallings; Prentice Hall
Operating Systems, 3/E; Gary Nutt; Addison-Wesley
Operating Systems: A Systematic View: 6/e;
William Davis, T.M. Rajkumar; Pearson

WEB SITES:

http://www.acm.org/sigs/sigops/
http://www.computerworld.com/article/2531905/operating-systems/timeline

INDIANA TECH
COURSE SYLLABUS

Week	Topic	Reference
1	Introduction Basics History	Text 1
2	Review of Hardware Components CPU architecture Memory structure Machine and Assembly Language	Notes
3	**Lab 0 Introduction** - receive requirements & develop specification Processes	Text 2
4	Turn in project specification. Begin test data design Threads **Lab 1** - complete test data	
5	Processor Scheduling	Text 5
6	**Exam 1**	Text 1, 2,5
	Synchronization	Text 6
7	Deadlock and Indefinite Postponement Turn in document with specification and test data. Begin design	Text 7
8	File Management	Text 8
9	**Exam 2**	Text 1,2,5-8
	Lab 2 Complete design	
10	Memory Management Turn document – spec/anal/design Begin coding and testing	Text10
11	Virtual Memory	
	Lab 3 continue coding and testing	
12	I/O	Text 9
13	I/O cont.	
	Exam 3	Text 1,2,5-10
14	Demonstrate project & turn in completed document. Drop code as plain text on Bullwinkle using name of one group member in the directory name (tarred & gzipped)	
15	Review	

Comprehensive Final Exam: TBA