

-Background

When and where	Class Mondays 8AM to 9:05AM (<i>Connery</i> group) or 9:30AM to 10:35AM (<i>Moore</i> group) Labs online	
Text	<i>Operating Systems Concepts</i> eighth edition or later, by Silberschatz, Galvin, and Gagne ISBN 978-0470128725	
Web sites	https://www.labouseur.com/courses/os/ and iLearn	
Instructor	Alan G. Labouseur Hancock 3007 (Office hours are online.)	Alan.Labouseur@Marist.edu 845-575-3832 Marist 845-440-1102 home office

-Grading

Letter Grades				
You can earn up to 1000 points, broken down as follows:	Incremental Projects and Labs	35.0%	350 points - 2@100, 1@150 points	[1, 2]
	Final Project and Labs	20.0%	200 points	[1, 2]
	Mid-term Exam	20.0%	200 points - one-page study sheet	[5]
	Final Exam	20.0%	200 points - one-page study sheet	[5]
	Attendance and Participation	2.5%	25 points for quality and quantity	[1]
	Laziness and Whining	2.5%	25 points for not (lazy or whining)	[1]

-Themes, Objectives, and Assessment

Assessment methods include assignments, quizzes, exams, discussions, presentations, peer review, and projects.	<p>In this course, I hope that you will . . .</p> <ul style="list-style-type: none"> • become an excellent software developer and craftsman. [1] • develop and demonstrate expertise and philosophical appreciation for the design and implementation of modern, event-driven, super cool Operating Systems. [2] • survive the ordeal of actually writing one, and thrive as a result, especially when you talk about this experience in your soon-to-come job interviews. [1, 2] • continually have reinforced the core concepts of encapsulated-oriented programming while being introduced to more advanced concepts like concurrency-oriented programming. [1, 2] • embrace the opportunity to develop a complex system over the course of the semester where you have to live with you prior mistakes and shortcuts or go back and fix them; either teaching a valuable lesson. [1, 2] • learn that developing the software is only half the battle, debugging and testing are critical skills for a talented professional, and skills that will be stressed. [1, 2] • enhance your continuing education skills. Capable problem solvers never stop learning. You will get practice in finding answers for yourself. Plus, preparation and presentation of the final project, as well as participation in class discussions, and assignments requires at least a little research, so there's that to look forward to. [1]
[References] refer to Department of Computing Technology Goals available at https://www.labouseur.com/courses/goals.pdf	

-Planned Schedule

#	Week	Due	Chapters	Topics
0	24-Aug	Lab 0	1, 2 13.2	Administrivia and our plan • Studying Operating Systems • Interrupts • I/O System Boot • OS Components • Discussion of TypeScript: What are we in for?
½	29-Aug	—	—	Special Saturday meeting for ALL students Online via Webex from 9:30am to 10:35am — A close look at <i>iProject 1</i>
1	31-Aug	Lab 1	2	OS services • System calls • System programs • User programs • Protection Virtual Machines and Us • Initial project code walkthrough
2	7-Sep	Lab 2 <i>iProject 1</i>	3, 4	Processes • Threads
3	14-Sep	Lab 3	8	Thoughts on <i>iProject 1</i> • Main Memory, part one Demo of some past projects • 6502a op codes
4	21-Sep	Lab 4	5	CPU Scheduling
5	28-Sep	<i>iProject 2</i>	5	More CPU Scheduling
5½	3-Oct	—	—	Special Saturday meeting for ALL students Online via Webex from 9:30am to 10:35am — A close look at <i>iProject 3</i>
6	5-Oct	—	—	Mid-term Exam in class One-page study sheet permitted. Some restrictions apply.
7	12-Oct	Lab 5	—	Thoughts on <i>iProject 2</i> and the Mid-term exam • Checkup on <i>iProject 3</i>
8	19-Oct	Lab 6	8	Main Memory, part two
9	26-Oct	Lab 7 <i>iProject 3</i>	12, 10, 11	File system concepts, implementation, and low-level details
A	2-Nov	Lab 8	12, 10, 11	Thoughts on <i>iProject 3</i> HTML5 storage • Virtual hardware implementation for Final Project
B	9-Nov	Lab 9	6, 7	Synchronization • Transactions • Deadlock
C	16-Nov	Lab A	9	Virtual Memory
D	23-Nov	—	—	Last on-campus class: Final Exam in class One-page study sheet permitted. Some restrictions apply.
E	30-Nov	—	—	Regular Monday meeting for ALL students Online via Webex from 9:30am to 10:35am — Reflection and advice for final project.
F	Dec. 7th 8:00am	Final Project	—	Show off your awesome operating system. Virtually.