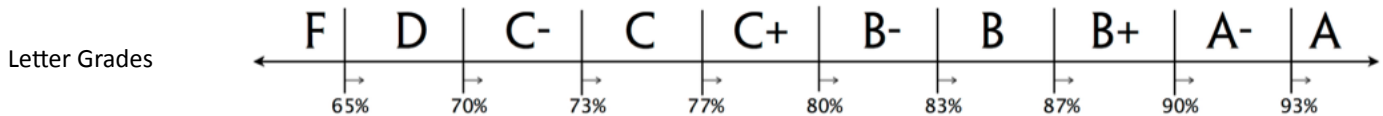




**-Background**

When and where	Class Thursdays 8am to 10:45am in HC 1021 • Labs Fridays 8am in HC 2020	
Required Text	<i>Operating Systems Concepts</i> eighth edition or later, by Silberschatz, Galvin, and Gagne ISBN 978-0470128725	
Web site	<a href="http://www.labouseur.com/courses/os">http://www.labouseur.com/courses/os</a>	
Instructor	Alan G. Labouseur Hancock 3007 (Office hours are posted.)	Alan.Labouseur@Marist.edu 845-575-3832 Marist 845-440-1102 home office

**-Grading**



You can earn up to 1000 points over the course of the semester, broken down as follows: (These weights are subject to minor variation.)	Incremental Projects and Labs	30.0%	300 points - 3 at 100 points each	[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	2.5%	25 points	[1]
	Constructive Participation	2.5%	25 points	[1]
	Laziness Adjustment	2.5%	25 points - for <b>not</b> being lazy	[1]
	Whining Adjustment	2.5%	25 points - for <b>not</b> whining	[1]

**-Themes, Objectives, and Assessment**

Assessment methods include assignments, quizzes, exams, discussions, presentations, peer review, and projects.

[References] refer to Department of Computing Technology Goals available at <http://www.labouseur.com/courses/goals.pdf>

In this course, I hope that you will . . .

- become an excellent software developer and craftsman
- 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]



## -Proposed Schedule

#	Week	Chapter	Topic	Due
0	31-Aug	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?	—
1	7-Sep	2	OS services • System calls • System programs • User programs • Concepts of protection Virtual Machines and Us • Initial project code walkthrough	Lab 0
2	14-Sep	3, 4	Processes • Threads	Lab 1
3	21-Sep	8	Main Memory, part one • Demo of some past projects • 6502a op codes	Lab 2 <b>iProject 1</b>
4	28-Sep	5	Thoughts on iProject 1 • CPU and Process scheduling	Lab 3
5	5-Oct	5	More CPU and Process scheduling • Review for Mid-term Exam If there's time, lab time for iProject 2 (bring your laptops)	Lab 4
6	12-Oct	—	<b>Mid-term Exam in HC 2023</b> One-page study sheet permitted. Some restrictions apply.	Lab 5
7	19-Oct	—	Thoughts on the Mid-term exam • Last minute lab time for iProject 2	<b>iProject 2</b>
8	26-Oct	8	Thoughts on iProject 2 • Main Memory, part two Prepare for Stranger Things season two.	Lab 6
9	2-Nov	12, 10, 11	File system concepts, implementation, and low-level details	Lab 7
A	9-Nov	12, 10, 11	HTML5 storage • Virtual hardware implementation for Final Project	<b>iProject 3</b>
B	16-Nov	6, 7	Thoughts on iProject 3 • Synchronization • Transactions • Deadlock	Lab 8
C	23-Nov	—	<i>No class meeting - Thanksgiving Break</i>	Lab 9
D	30-Nov	9	Virtual Memory • Review for Final Exam	Lab A
E	7-Dec	—	<b>Final Exam in HC 2023</b> One-page study sheet permitted. Some restrictions apply.	—
F	12-Dec	—	<b>10:30am in HC 1021</b> : Final project due • Selected demos	<b>Final Project</b>