

**Department of Mathematics and Computer Science
St. Mary's College
St. Mary's City
Maryland 20686-3001**

Semester: Spring 2015
Course Number: COSC 335.01
Course Title: Operating Systems
Prerequisites: COSC 230 – Computer Architecture
Meeting Times: Monday, Wednesday, Friday 10:40 am – 11:50 am
Location: Schaefer Hall, Room 160
Instructor: Simon Read
Office Location: Schaefer Hall, Room 150
Office Hours: <http://faculty.smcm.edu/sread>
Telephone Number: ~~Extension 4442 (240-895-4442)~~
E-Mail Address: sread@smcm.edu
Class Web-Site: <http://blackboard.smcm.edu>

Required Textbooks:

“Operating Systems Concepts”, 9th Ed., Silberschatz, Galvin and Gagne, Wiley, 2012,
ISBN 978-1118063330.

Catalog Description:

This course studies the structure, function of and algorithms used in operating systems. Topics include scheduling; processes and threads; inter-process communication; memory management; file systems; protection and security; and input-output management. The course will compare the features and implementation of two current operating systems.

Objectives:

This course focusses not on the issues that need to be considered by the user of an operating system, but those that need to be considered by the implementer. This will give you a better understanding of the ways in which you need to program to exploit the features of your target operating system. While a few years ago only three operating systems were important – the Windows series, the Mac OS X series and the Unix series – a large number of operating systems have emerged recently especially for mobile devices.

Schedule

The schedule for this class is published on Blackboard. It may change, but keeping to the schedule is important to cover the material.

Teaching Method:

The sessions will be divided into two kinds – lecture sessions and critical thinking sessions. During the lecture sessions the instructor will present the material covered in (part of) a chapter from the text book. You are expected to having a passing familiarity with the material from reading the text *before* coming to class. During the critical thinking sessions, we will discuss problems related to the material presented. As part of the discussion you may be called upon to provide an opinion or part of a solution to a problem.

In order to reinforce the material presented, there will be several programming projects during the semester. In each of these you will provide a simple implementation of a part of an operating system written in C.

Evaluation

There are four main elements to the assessment of this course – the projects (**weight 15% each**), a mid-term examination (**weight 10%**) and a final examination (**weight 20%**) and class participation (**weight 10%**).

Both examinations will be set in a take-home format to allow a problem solving style of question. You should look at the rubric posted on Blackboard for each project for more details on how it will be assessed.

Policies

Communications

This course uses the course management software Blackboard. This system will be used to provide: announcements concerning the class; material presented in class; homework assignments; and external links to useful World Wide Web resources. Your grades will be displayed on Blackboard. **You** are responsible for making sure that this grade sheet accurately reflects the grades given for each piece of work.

Attendance

Attendance in class is an important element of instruction. When you do not attend class not only does your study suffer, but also that of your classmates. Therefore, attendance in class is required. Formal attendance will be taken in every class. In accordance with College policies you are allowed two unexcused absences. Absences will be excused in the case of illness, conflict with athletic events and similar circumstances. Where possible the instructor should be informed in advance of the class.

Plagiarism

Students must be familiar with the “Student Code of Rights and Responsibilities”, as stated on pages 81-95 in the “To The Point Student Handbook”, especially Article III Section 1. Not being familiar with your rights and responsibilities is no excuse. Any direct quotes and someone else's ideas or information **must** be referenced.

Incompletes

“An I (Incomplete) may be given by the instructor only at the request of the student when extraordinary circumstances, such as extended illness or other serious emergency beyond the control of the student, prevent the student from completing a course within the academic term. To qualify for an Incomplete, the extraordinary circumstances must have occurred near the end of the term and the student must have been attending the course regularly throughout the term up until that point.”

- Academic Policies, St. Mary's College of Maryland, Catalog 2002-2003, p. 181

Late Submission

Except for unusual, documented circumstances assignments will not be accepted late. This means you should submit whatever you have, even if it is incomplete, before the deadline.

Grading

To earn a C grade, your work must show a strong understanding of the information presented in the course. To earn a B grade your work must show a strong understanding of the information presented in the course ***and*** an ability to apply this information in problem solving. To earn an A grade your work must show a strong understanding of the information presented ***and*** an exceptional ability to apply this information in problem solving.