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

Semester:	Fall 2014
Course Number:	COSC 420.01
Course Title:	Distributed and Parallel Computing
Prerequisites:	COSC 130
Meeting Times:	Monday, Wednesday 2:40 pm – 4:30 pm
Location:	Schaefer Hall, Room 160
Instructor:	Simon Read
Office Location:	Schaefer Hall, Room 150
Office Hours:	See http://faculty.smcm.edu/sread and by appointment
Telephone Number:	~~Extension 4442 (240 895 4442)~~
E-Mail Address:	sread@smcm.edu
Class Web-Site:	http://blackboard.smcm.edu
Required Textbook:	
None	

Catalog Description:

This course studies the methods for using several computers connected by a network to solve a single problem. Topics include: networking services; middleware (CORBA, DCOM, SOAP, RMI and RPC); two- and three-tier client-server systems; algorithms for parallel computing; performance evaluation; and hardware architectures (clusters, grids, surfaces).

Objectives:

Almost every computing system being built now is concurrent, distributed and increasingly parallel. This trend will only continue with the emergence of “multi-core” processors and pervasive networking. This course will provide an introduction to the core problems, and some of their solutions, associated with these systems. In addition, it will further enhance the student's ability to write correct programs and to think critically about problems.

Methods of Instruction:

A standard lecture and discussion format will be used to present the materials. The course sessions will be supported with Powerpoint posted to Blackboard. In addition, several programming projects will reinforce the material and develop the students problem solving skills using programming languages.

Assessment:

The assessment of this class will be entirely through programming projects. There will be a number of such projects depending on how the class goes, most are based around Conway's Game of Life (**the weight of the project will depend on its duration and a project will always be pending**). These will test your ability to write programs that encapsulate the concepts from the class. Rubrics will be provided for each of these assignments in order to communicate what it is important for you to focus on.

Finally, participation (**weight 10%**) in the classes is an important aspect of the learning experience in this class both for you and your colleagues.

Policies:

Communications

This course uses the course management software Blackboard. This system will be used to provide: announcements concerning the class; homework assignments; model solutions; 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.

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.

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.