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

Semester: Spring 2007 Course Number: COSC 100.01

Course Title: Computers in Society

Prerequisites: None

Meeting Times: Mondays, Wednesdays and Fridays, 9:20am to 10:40am

Location: Schaefer Hall, Room 165

Instructor: Simon Read

Office Location: Schaefer Hall, Room 174

Office Hours: Mondays 10:40am to 11:50am and 4:00pm to 6:00pm, and

Wednesdays 1:10pm to 2:30pm.

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yahoo.com}, sread@smcm.edu@msn.com

Class Web-Site: http://courses.smcm.edu

Required Textbook:

None

Catalog Description:

This courses explores computing and the role it plays in modern society. Everyday applications, such as word processing, are used to reveal the principal concepts of computing. The effect of computing is explored through topics such as – ethics; codes and ciphers; computing history; the Internet; artificial intelligence; computers and the environment. This course is suitable for non-majors who want to gain a deeper understanding of computing and use it more effectively in their own discipline.

Note: This class *does not* satisfy a General Education Requirement, nor does it count as an elective in the Computer Science Major.

Objectives:

This course will help you to appreciate the effects, both positive and negative, on our individual lives and society in the USA and elsewhere in the World. The course will also show you how to use the most common application software effectively to analyse information and to create documents and presentations that communicate it effectively. In the course you will also learn about the development of computers in the past and more

about the present state of computing. You will be able to use this information to predict the possible developments of computing in the near future.

This course will also help you to develop your skills in – finding and evaluating information; critical thinking; developing arguments; written and oral communication; and working in a team.

Methods of Instruction:

Weekly online research projects and in-class discussions will introduce you to a variety of computing related topics and help you develop skills to quickly find large amounts of information about topics.

Documents on-line and in-class talks will be used to provide information about applications, issues and topics.

Assigned readings, lecture, class discussion and in-class activities will be used to convey the informational part of the course, to re-enforce that material and to develop critical thinking skills.

An "apologetic" paper will be used to develop your skills in finding and evaluating evidence, discovering an argument and communicating that effectively. A formal presentation of the argument will help you develop your skills in oral presentation.

Assessment:

There are five elements to the assessment in this class – research assignments; skills homeworks; a paper; a presentation; and participation in class.

Throughout the semester you will be assigned topics upon which to develop your opinion based on online research (weight 10%). During the first part of the semester, you will also be assigned skills homeworks based on material covered in class (weight 10%). Since the class is very much based on in class work, both individual and group, everyones participation is essential (weight 10%).

You will write a paper on a topic of your choice related to the material covered in this class. You will be asked to submit stages of writing this paper – an annotated bibliography (weight 5%); an outline (weight 5%); a draft (weight 10%) and a final version (weight 25%). You will also be asked to give a 10 minute presentation of the argument you develop in your paper (weight 25%).

There will be no formal examinations or tests in this course.

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.

Schedule:

During the first few weeks of this course we will be looking at the tools we can use to discover, analyse and communicate information and arguments using computers. In particular we will see how to effectively use the World Wide Web, Digital Libraries and Databases to find information and evidence. We will see how we can use spreadsheets to analyse numerical information and word-processors to help structure arguments. And finally we will see how to use word-processors, spreadsheets and presentation applications to communicate our ideas effectively.

We will develop an understanding of various ethical points of view and use them to examine a number of important topics in computing today. These topics will introduce many of the controversial issues in the discipline. You will use these topics, or your own ideas and interests, to select a topic on which you will write your paper.

In the latter part of the semester, while you are working on your paper, we will look at some of the technical aspects of computing. These will focus on helping you to develop a better understanding of how concepts in Computer Science affect the way you use computers.