Department of Mathematics and Computer Science
St. Mary's College of Maryland
47645 College Dr
St. Mary's City
Maryland 20686

Semester: Fall 2018

Course Number: COSC 120.01

Course Title: Introduction to Computer Science I

Prerequisites: None

Meeting Times: Monday, Wednesday and Friday 9:20 am – 10:30 am

Location: Schaefer Hall, Room 165

Instructor: Simon Read

Office Location: Schaefer Hall, Room 173

Office Hours: See http://faculty.smcm.edu/sread
                       and by appointment

Telephone Number: ~~Extension 4369 (240 895 4369)~~

E-Mail Address: sread@smcm.edu

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

Required Textbook:

"Java: How to Program", Deitel and Deitel, 10th Edition, Pearson, 2016.

Catalog Description:

This course surveys computer science and introduces object-oriented programming. A survey of the pivotal fields of computer science, including software engineering; computer networks; programming languages; algorithms; computer architecture; models of computation; operating systems. Students begin to solve simple problems using object-oriented programming. The emphasis is on implementing object-oriented designs. This course is suitable for non-majors who want an overview of computer science and to learn to solve problems with programs. COSC 120 satisfies the General Education requirement in Mathematics.

Objectives:

At the completion of COSC 120, students will be able to interpret class and activity diagrams as demonstrated by creating Java classes based on the diagrams.

At the completion of COSC 120, students will be able to replicate object-oriented programs as demonstrated by developing programs from given class diagrams.

At the completion of COSC 120, students will be able to identify areas of concentration in computer science as demonstrated by answering related questions on examinations through the semester.

At the completion of COSC 120, students will be able to use decision making control structures as demonstrated by writing a Java program which utilizes if/else or switch statements.

At the completion of COSC 120, students will be able to use looping control structures as demonstrated by writing a Java program which utilizes loops.

At the completion of COSC 120, students will be able to implement variables of assorted types as demonstrated by developing programs using simple and complex variables.

Assessment:

For Majors and Minors in Computer Science this class is required, so you must obtain a C- grade or better to graduate.

There are four elements to the assessment of this class: there are three examinations, a written project, three programming projects and in-class or homework assignments.

There will be two mid-term examinations (**weight 15% each**) and a cumulative final (**weight 20%**).

There will be a written essay assignment (**weight 10%**) for which a draft, peer-review and final copy will be required.

There will be three programming projects (**weight 10% each**) which will each last several weeks. Programming projects should be completed with a partner.

There will be in class assignments during many class times (**weight 10%**). These assignments will have a component to be turned in. The deadline for these assignments will be the beginning of the next class. All in-class assignments should be completed with a partner.

Full explanations of the exams and projects will be given as the semester goes along.

Writing Center:

The Writing & Speaking Center, located in the Library Annex, offers free consultations in writing and speaking for students at all levels and in all disciplines. No matter what you're writing and no matter where you are in the process (generating ideas, drafting, revising or proofreading), the peer tutors in the Center can assist you. These tutors are friendly students and also excellent writers with special training as writing consultants. They would not grade or correct your papers; instead, they'd coach you and help you become a better writer. Similarly, the tutors are also trained to help you plan and practice presentations and other speaking assignments. I encourage you to use the Writing and Speaking Center as much as possible. You can make a one-time or repeating appointment with the Center by visiting their website, www.smcm.edu/writingcenter, and clicking 'Schedule an Appointment'. At the same website, you can find helpful resources on many writing- and speaking-related topics.

Title IX and Sexual Misconduct:

As stated in the St. Mary's Way, the College is a place where we strive to foster relationships based upon mutual respect, honesty, integrity, and trust. As such, we are

committed to providing an educational, living, and working environment free from all forms of harassment and discrimination for all members of our community. The College prohibits all forms of sexual or gender-based harassment, discrimination or misconduct, including sexual assault, sexual harassment, relationship violence, and stalking.

If you or someone you know has experienced sexual misconduct, you may find information about resources and options on the Campus Rights webpage (www.smcm.edu/campus-rights) or by contacting the College's Title IX Coordinator, Michael Dunn (mkdunn@smcm.edu or 240-895-4105).

Under College policy, faculty members are required to share any reports of sexual misconduct with Michael in order to make sure that the College is responding appropriately to address the health and safety needs of members of our community.

There are on-campus confidential resources available, including the counselors at the Wellness Center (240-895-4289) and the Sexual Misconduct Advocacy and Resource Team student-run 24/7 hotline (301-904-2015). More information about on- and off-campus confidential resources, as well as medical treatment, law enforcement, and other support services, may be found on the Campus Rights webpage.

Policies:

1. 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.

2. Academic Integrity – Please refer to the Student Handbook Article II Section C for definitions of Cheating, Plagiarism, Falsification and Resubmission of work. Also available as http://www.smcm.edu/tothepoint/code-of-student-conduct/. Violations of these types will be dealt with accordingly. Not being familiar with your rights and responsibilities is no excuse.

3. Work "In Groups" – Outside of class and in class, you may discuss concepts together. All assignments, with the exception of the essay project and examinations, should be completed in pairs (this is known as Pair Programming in industry). This means that you will not exchange code (in person or via email) with classmates other than your teammate in this or any COSC 120 class. You should not seek nor accept help from students other than the Classroom Assistants appointed for any section of COSC 120 – Introduction to Computer Science I or COSC 130 – Introduction to Computer Science II for this semester. Their contact details will be provided to you. The instructor and Classroom Assistants are available during class assignments to help you. You should expect to need their help periodically; this is part of the learning experience for programming. It is important to get help from a qualified and trained resource to help you completely understand the material in hand. Since each concept builds on the previous one it is vital to completely understand each concept. If you feel you don't please seek help from the instructor or Classroom Assistants.

4. Academic Accessibility – Saint Mary's College of Maryland is committed to providing access to the educational experience to students with disabilities and health conditions that impact learning. If you have received a letter from the Office of Student Support Services (OS3), which outlines the academic accommodations to which you are entitled, you *must* meet with me to review that letter and discuss how your learning needs intersect with the course expectations. If you suspect that you have a learning need that could benefit from academic accommodations, you should contact the Office of Student Support Services, who can help you learn more about how to proceed in this instance as well.

5. Late Submissions – Late work will suffer a 10% penalty for every 24 hours the work is late. This means that if a project is due at 5:00 pm Monday and is handed in anywhere from 5:01 pm Monday until 5:00 pm Tuesday, it will have a 10% late penalty.

6. 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.

7. Conduct – Although no penalties will be attached to the following they are rude to both your instructor and class mates. If you *must* speak with one of your classmates, during the lecture phase of the course meeting please do so quietly. Turn cell phones to silent or off during class. During class time computers may only be used for class related activities, such as note taking, trying demonstration projects and in-class worksheets. This means, specifically, no email and no chat clients.

8. Tardiness – Repeated and excessive tardiness is rude to me and your classmates. Again, you get one freebie. Repeated offenses may result in you being told that you were never here for that class period. If you have a legitimate commitment elsewhere that may result in your tardiness, let me know ahead of time.

9. 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.

10. 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.

In-class assignments will be graded on a three point scale because they are simple. If nothing is turned in then 0 points will be assigned. If something was turned in, but it was not close to being correct then 1 point will be assigned. If a good attempt was made to answer the given question, but there were errors then 2 points will be assigned, If the solution was complete and correct then 3 points will be assigned. If the assignment lasts more than one class period a 6 or 9 point scale along the same lines will be used.

11.   Extra Credit – During the semester, there will be several Natural Sciences and Mathematics Colloquia. These are announced by "All Student" emails. If you attend one of these colloquia and provide a short description of the topics of the talks and what you got out of them, then your final grade will be increased by 1%. This can be repeated up to 3 times for a maximum increase of 3%.