

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

Semester: Fall 2018
Course Number: COSC 130.01
Course Title: Introduction to Computer Science II
Prerequisites: COSC 120
Meeting Times: Monday, Wednesday and Friday 10:40 am – 11:50 am
Location: Schaefer Hall, Room 160
Instructor: Simon Read
Office Location: Schaefer Hall, Room 173
Office Hours: Refer to <http://faculty.smcm.edu/sread>
Telephone Number: ~~Extension 4369 (240-895-4369)~~
E-Mail Address: sread@smcm.edu
Class Web-Site: <http://blackboard.smcm.edu>
Required Textbooks:

“Java: How to Program”, Deitel and Deitel, 9th Edition, Pearson, 2012.

Catalog Description:

This course examines object-oriented design and programming in greater detail. An examination of the use of the data structures provided by language-specific libraries, and some common simple algorithms. Students learn to design and implement simple applications. The emphasis of this course is on learning good design. This course is suitable for non-majors who want to improve their ability to solve problems using programs.

Objectives:

At the completion of COSC 130, students will be able to use recursion as demonstrated by developing a program with recursive methods.

At the completion of COSC 130, students will be able to use file operations as demonstrated by developing a program that reads and processes data from a file.

At the completion of COSC 130, students will be able to use arrays as demonstrated by developing a program that processes data held in an array.

At the completion of COSC 130, students will be able to use graphical user interface components as demonstrated by developing a program that uses buttons, layout managers and shape drawing.

At the completion of COSC 130, students will be able to use inheritance as demonstrated by developing an object-oriented program.

At the completion of COSC 130, students will be able to implement object-oriented programs as demonstrated by developing programs from problem statements.

At the completion of COSC 130, students will be able to use exceptions as demonstrated by using try-catch blocks appropriately in programs.

Assessment:

There will be two examinations, a midterm (**weight 10%**) and a final (**weight 30%**). The final is cumulative.

There will be a number of brief homeworks set during classes (**weight 20% total**). These will typically be due by the beginning of the following class meeting.

There are four programming projects in this class (**weight 10% each, 40% total**). These projects are challenging, but reinforce the material covered during the class meetings.

You should look at the rubric posted on Blackboard for each project for more details on how it will be assessed. These will be posted by the time you start the project.

Title IX and Sexual Misconduct:

As stated in the St. Mary's Way, the College is a place where people foster relationships based upon mutual respect, honesty, integrity, and trust. As such, the College is 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). Please note that under College policy, faculty members are required to share any reports of sexual misconduct with Michael Dunn 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 (SMART) 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 – 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.
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. Repeated or excessive tardiness is intrusive to the lecture phase.

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 – Extra credit assignments may be assigned during the semester.