# MONTGOMERY COLLEGE
## Rockville Campus
## Engineering, Physical and Computer Sciences Department
## CMSC140 Intro to Programming

## Instructor Information

Name:                                          Office Location:
Mailbox:                                       Office Phone:
Email:
Office Hours:

## Course Information

Semester:                                      Course CRN:
Class starts:                                  Class ends:

Class Meetings:                                Classroom:
Midterm Exam:                                  Final Exam:

Check MyMC class schedule for your Specific        Check MyMC class schedule for your
Deadline to Drop without a grade W or to change    Specific Refund Deadlines
from audit to credit or from credit to audit

## Course Description

Introduces programming and problem solving using a contemporary programming language. Topics include principles of procedural programming, software development and debugging techniques, control structures, data types, functions, one-dimensional arrays, and file processing. Using a computer, students complete required lab assignments.
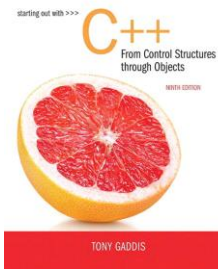***Assessment Level(s):*** ENGL 101/ENGL 101A, MATH 050*, READ 120. Three hours each week. Formerly CS 140.*

*3 semester hours*

## Course Outcomes

| # | Upon completion of the course, the student will be able to: |
|---|---|
| 1. | Demonstrate the ability to design, write, test, and debug computer programs using procedural techniques |
| 2. | Demonstrate the basic syntax and expressions of the programming language in use. |
| 3. | Select and apply the appropriate control structure. |
| 4. | Implement top down design techniques and subprogramming. |
| 5. | Declare and process one-dimensional arrays, including implementation of algorithms for searching and sorting arrays |
| 6. | Use simple file input and output operations |

## Course Materials



**Textbook:** Starting OUT with C++: from control structures through objects, Tony Gaddis, 9th Edition

MyProgrammingLab:
http://www.myprogramminglab.com

Textbook and other materials may be purchased through the bookstore

### To register for MyProgrammingLab, you will need:

- A MyProgrammingLab Student Access Code. Student Access Code purchase options include:



  - New textbooks can be packaged with a Student Access Code.
  - You can order access codes in a package (book + access code)
  - Stand-alone Student Access Codes can be purchased from your bookstore.
- Purchase access online here
  http://www.pearsonmylabandmastering.com/northamerica/myprogramminglab/students/get-registered/index.html
- A Course Title: CMS140 Intro to C++
- A Course ID: xxxxxxxx
- A valid email address
- Your school's ZIP code

### How to register for MyProgrammingLab

- Go to www.myprogramminglab.com and click **Student**.
- Choose your registration method (redeem your Student Access Code, or purchase access online).
- Read and accept the License Agreement and Privacy Policy.
- Follow the on-screen instructions to complete your registration.
- Click the **Log in Now** link to enroll in your course.
- Verify your information is correct, and click Next.
- Type in your Course ID: **XXXXXXX** and select Next.
- Verify that your information is correct and click Next.

## Grade Basis

| Final Examination | 30% |
|---|---|
| Midterm Examination | 20% |
| Quizzes on Reading Assignments | 10% |
| Assignments in MyProgrammingLab | 10% |
| Programming Projects | 20% |
| Homework/Discussions/Academic Plan | 10% |
| **Total:** | **100%** |

## Grading Scale:

| 90 - 100% | A |
|---|---|
| 80 - 89% | B |
| 70 - 79% | C |
| 60 - 69% | D |
| Below 60% | F |

## General Class Policies

- ❖ You are responsible for all work missed, and for meeting assignment due dates when absent. Please call or email your instructor if you are going to be late or absent.
- ❖ You are strongly encouraged to contact your instructor at home by phone or e-mail if you are having difficulties, or have any questions about assignments.
- ❖ Please include your name and the course information in the submitted assignments.
- ❖ Incomplete assignments receive no more than 50% of the grade.
- ❖ Assignments are considered incomplete, if they do not compile, they do not contain reasonable comments.
- ❖ There is always a means to submit your assignments on time.  Be creative, be persistent, and keep your instructor informed!
- ❖ All assignments (Tests, Quizzes, Assignments, Projects, and Discussions) must be turned in on or before the due dates to receive full credits.
- ❖ Missed Tests, Quizzes, Assignments, and Discussions:  NO MAKEUPS without a doctor's excuse. If the Final Exam is not taken, the student will receive a grade of F for the course.

## Course Topics

| Topics |
|---|
| Chapter1  An introduction to Computers and Programming |
| Chapter2  Introduction to C++ |
| Chapter3 Expressions and Interactivity |
| Chapter4 Making Decisions |
| Midterm Exam |
| Chapter5  Loops and Files |
| Chapter6  Functions |
| Chapter7  Arrays |
| Chapter8  Searching and sorting Arrays |
| Final Exam |