MONTGOMERY COLLEGE

**Rockville Campus**

**Engineering, Physical and Computer Sciences Department**

**CMSC140 Intro to Programming**

**Online Fall 2021**

**Start 08/30**

**Instructor Information**

|  |  |
| --- | --- |
| Name: Greg Grinberg | Office Location: SC335 |
| Mailbox Location:SC436B | Office Phone: |
| Email:  [grigoriy.grinberg@montgomerycollege.edu](mailto:grigoriy.grinberg@montgomerycollege.edu)  Remind: <https://www.remind.com/join/4k7fgb> | Office Hours Online via zoom:  Monday 11:00am - 1:00pm  Wednesday 11:00am - 1:00pm  Friday 8:30pm - 9:30pm    <https://montgomerycollege.zoom.us/j/8714951078> |

**Course Information**

|  |  |
| --- | --- |
| Semester: Fall 2021 | Course CRN: 20433/22867 |
| Class starts: 08/30 | Class ends 12/18 |
| Class Meetings: online  Midterm Exam: 10/17 at 12pm  Check MyMC class schedule for your Specific Deadline to Drop without a grade W or to change from audit to credit or from credit to audit | Final Exam: 12/18 at 12pm  Check MyMC class schedule for your Specific Refund Deadlines |
|  |  |

This is an online course via Blackboard. All of the course work occurs online. Active participation in the online activities and completion of all online assignments is required in order to pass this course. Log onto the course **at least three times per week** and demonstrate presence through posting and interaction. You will use Interactive Text Pearson Revel to do and submit Exercises. You will use a standard C++ tool: MS Visual Studio for Windows OS or Codelite for Mac OS to do Projects.

**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](http://catalog.montgomerycollege.edu/search_advanced.php?cur_cat_oid=6&search_database=Search&search_db=Search&cpage=1&ecpage=1&ppage=1&spage=1&tpage=1&location=3&filter%5Bkeyword%5D=CMSC#tt4154)*/*[ENGL 101A](http://catalog.montgomerycollege.edu/search_advanced.php?cur_cat_oid=6&search_database=Search&search_db=Search&cpage=1&ecpage=1&ppage=1&spage=1&tpage=1&location=3&filter%5Bkeyword%5D=CMSC#tt1256)*,*  [MATH 050](http://catalog.montgomerycollege.edu/search_advanced.php?cur_cat_oid=6&search_database=Search&search_db=Search&cpage=1&ecpage=1&ppage=1&spage=1&tpage=1&location=3&filter%5Bkeyword%5D=CMSC#tt4590)*,* [READ 120](http://catalog.montgomerycollege.edu/search_advanced.php?cur_cat_oid=6&search_database=Search&search_db=Search&cpage=1&ecpage=1&ppage=1&spage=1&tpage=1&location=3&filter%5Bkeyword%5D=CMSC#tt4860)*.* *Three hours each week.* *Formerly CS 140.*  
*3 semester hours*

**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 sub-programming. |
| 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:

* Pearson Revel online platform/textbook: Starting Out with C++: From Control Structures to Objects (10th Edition), Tony Gaddis, Pearson (Free only for Fall 2021 Pilot sections)
* How to access: Free Access via Blackboard side Menu “Pearson Revel”. Use the following access code: REVGSO-STANK-NOMEN-TASTE-GUYOT-NINES

**Grade Basis**

|  |  |
| --- | --- |
| Final Examination | 30% |
| Midterm Exam | 20% |
| Programming Projects | 20% |
| Exercises in Pearson Revel | 15% |
| Programming Homework, Quizzes on Reading Assignments, Review Quizzes, Assignment (Academic Plan), Class Participation, Online Discussions | 15% |
| **Total:** | **100%** |

**Grading Scale:**

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

**Achieving the Promise Academy (ATPA) Course Support:**

* This class comes with an Achieving the Promise Academy (ATPA) Embedded Coach (EC) to provide you with supplemental support. The EC is a faculty member who knows the course material well and is available to assist you outside of class with mastering course content and other academic skills, much like a learning center tutor. You will see the coach during occasional online class visits, on our Blackboard site, and in optional weekly study sessions. **Your ATPA Embedded Coach is (Ara Kechiantz&** [**ara.kechiantz@montgomerycollege.edu**](mailto:ara.kechiantz@montgomerycollege.edu) **). Please look for an email from your coach within the first two weeks of class about his virtual study sessions**.
* All ATPA students (that is you!) also have access to other unique resources. Visit [www.montgomerycollege.edu/atpa](http://www.montgomerycollege.edu/atpa) to learn more. Communicate regularly with your instructor and your ATPA coach to maximize your success in this class.

**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 by e-mail or remind if you are having difficulties or have any questions about assignments.
* Please include your name and the course information in the submitted assignments.
* 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 Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
| Weeks and dates | Topics | Assignments and Quizzes | Due date |
| Week 1  08/30 – 09/06 | Syllabus  Chapter1 An Introduction to Computers and Programming  Chapter2 Introduction to C++ | Blackboard:  Week 1 Discussion  Quiz 1  Orientation Activities  Programming Homework 1  Pearson Revel:  Exercises Chapter 1 | 09/06  11:59pm |
| Week 2  09/07 - 09/13 | Chapter2 Introduction to C++(continued) | Blackboard:  Week 2 Discussion  Quiz 2  Pearson Revel:  Exercises Chapter2 | 09/13  11:59pm |
| Week 3  09/14 - 09/20 | Chapter3 Expressions and Interactivity | Blackboard:  Week 3 Discussion  Pearson Revel:  Exercises Chapter3 | 09/20  11:59pm |
| Week 4  09/21 – 09/27 | Chapter3 Expressions and Interactivity  (continued) | Blackboard:  Week 4 Discussion  Project1  Quiz 3 | 09/27  11:59pm |
| Week 5  09/28 – 10/04 | Chapter4 Making Decisions | Blackboard:  Week 5 Discussion  Project 2 Design  Pearson Revel:  Exercises Chapter4 | 10/04  11:59pm |
| Week 6  10/05 - 10/11 | Chapter4 Making Decisions  (continued) | Blackboard:  Week 6 Discussion  Quiz 4  Project 2 Implementation | 10/11  11:59pm |

|  |  |  |  |
| --- | --- | --- | --- |
| **eeks and dates** | **Topics** | **Assignments and Quizzes** | **Due date** |
| Week 7  10/12 - 10/18 | **Midterm Exam**  10/17 at 12:00pm |  | 10/17  12:00pm |
| Week 8  10/19 – 10/25 | Chapter5 Loops and Files  Advising Day 10/19 | Blackboard:  Week 8 Discussion  Project 3 Design  Pearson Revel:  Exercises Chapter5 | 10/25  11:59pm |
| Week 9  10/26 – 11/01 | Chapter5 Loops and Files  (continued) | Blackboard:  Week 9 Discussion  Assignment: Creation of Academic Plan  Project 3  Quiz 5 | 11/01  11:59pm |
| Week 10  11/02 – 11/08 | Chapter6 Functions | Blackboard:  Week 10 Discussion  Project 4 Design  Pearson Revel:  Exercises Chapter6 | 11/08  11:59pm |
| Week 11  11/09-11/15 | Chapter6 Functions  (continued) | Blackboard:  Week 11 Discussion  Project 4 Implementation  Quiz 6 | 11/15  11:59pm |
| Week 12  11/16– 11/22 | Chapter7 Arrays | Blackboard:  Week 12 Discussion  Project 5 Design  Pearson Revel:  Exercises Chapter7 | 11/22 |
| Week 13  11/23 – 11/29 | Thanksgiving Holiday |  | 11/29 |
| Week 14  11/30 – 12/06 | Chapter7 Arrays (continued)  [Chapter8](http://www.cs.armstrong.edu/liang/intro5e/review/06review.pdf)  Searching and sorting Arrays | Blackboard:  Week 13 Discussion  Quiz 7  Project 5 Implementation  Pearson Revel:  Exercises Chapter8 | 12/06 |
| Week 15  12/07 – 12/13 | [Chapter8](http://www.cs.armstrong.edu/liang/intro5e/review/06review.pdf)  Searching and sorting Arrays  Course Review | Blackboard:  Week 14 Discussion  Programming Homework  Quiz 8  Review Assignment | 12/13 |
| Week 16  12/14 – 12/18 | **Final Exam** | Final Exam | 12/18  Saturday at 12pm |

**Part 2 of the Syllabus**

**College Policies that Support this Course, cmsc140**

**Standards of College Behavior:** Montgomery College seeks to provide an environment where discussion and expression of all views relevant to the subject matter of the class are recognized and necessary to the educational process. However, students do not have the right to interfere with the faculty member’s right to teach or the other students’ rights to learn. Faculty and staff set the standards of behavior that are within the guidelines and spirit of the Student Code of Conduct or other College policies for classrooms, events, offices, and areas, by announcing or posting these standards early in the semester. For more information, please refer to Number 42001 in <http://cms.montgomerycollege.edu/pnp/#Chapter_4>

**Academic Honesty:** Academic dishonesty in college is a very serious offense.

All students are expected to do their own work. You may receive insights, editing and debugging help from tutors, fellow students, and acquaintances, **but you cannot share code**. **You are expected to do all programming, lab, and homework assignments by yourself – DO NOT GIVE YOUR CODE TO YOUR FRIENDS!** You are responsible for completing the assignments yourself. (Your fingers are the only ones that should touch the keyboard). If your assignment uses features of the language that have not yet been covered in this course, you will be asked to defend your work. Academic dishonesty will not be tolerated. Programming assignments are submitted to a plagiarism-checking utility which compares each submission with others, and rates them by similarity. If you turn in the same assignment or uncommonly similar assignment to another student (past or present), or if your assignment is uncommonly similar to code found on the internet, you will receive 0 points for the assignment, and potentially a grade of “F” for the course. You will be reported to the Dean of Student Development. For more information, please refer to Number 42001 in <http://cms.montgomerycollege.edu/pnp/#Chapter_4>

**Attendance Policy:** Students are expected to attend all class sessions. In cases involving excessive absences from class, the instructor may drop the student from the class. An excessive absence is defined as one more absence than the number of classes per week during a fall or spring semester; the number of absences is pro-rated for accelerated sessions.

**Withdrawal and Refund Dates:** It is the student’s responsibility to drop a course. Non-attendance of classes or failure to pay does not constitute official withdrawal. To view specific drop deadlines, log into your MyMC account:   
Click on ‘My Class Schedule’ under Student Quick Links  
Select the current term  
Click on ‘View Drop Deadline Dates’ at the bottom of the page

**Audit Policy:** All students registered for audit are required to consult with the instructor before or during the first class session in which they are in audit status, and students are required to participate in all course activities unless otherwise agreed upon by the student and instructor at the time of consultation.

**Disability Support Services:** Any student who needs an accommodation due to a disability should make an appointment to see the course instructor during office hours. In order to receive accommodations, a letter from Disability Support Services (LOCATIONS: Germantown-SA 189; Rockville-CB 122; or Takoma Park/Silver Spring-ST 122) will be needed. Furthermore, any student who may need assistance in the event of an emergency evacuation must identify to the Disability Support Services Office; guidelines for emergency evacuations for individuals with disabilities are found at: [http://cms.montgomerycollege.edu/edu/secondary5.aspx?urlid=52](http://cms.montgomerycollege.edu/edu/secondary5.aspx?urlid=52%20)

**Veteran’s Services:** If you are a veteran or on active or reserve status and you are interested in information regarding opportunities, programs and/or services, please visit the Combat2College Web site at<http://www.montgomerycollege.edu/combat2college/>

**Delayed Opening or Closing of the College:** On occasion, Montgomery College will announce a late opening or early closing of a specific campus or the entire college because of weather conditions or other emergencies.

* *If a class can meet for 50% or more of its regularly scheduled meeting time* ***OR*** *if the class can meet for 50 minutes or more,* ***it will meet****.*
* Montgomery College will always operate on its regular schedule unless otherwise announced. Depending on the nature of the incident, notifications of emergencies and changes to the College’s operational status will be communicated through one or more communication methods including the College’s web page <http://montgomerycollege.edu>

For the most up-to-date information regarding College openings, closings, or emergencies, all students, faculty, and staff are encouraged to sign up for email and text alerts via Montgomery College ALERT. Registration information is available at [*www.montgomerycollege.edu/emergency*](http://www.montgomerycollege.edu/emergency)

**Communication:** The Montgomery College **e-mail account is the official means of communication.** Check your email account routinely for course announcements, invoices, important admission/registration information, waitlist status etc.

**Course Changes:** The instructor reserves the right to alter the schedule of the course if necessary but will notify the students of any changes to the schedule before the changes are implemented.

*Important Student Information Link*

*In addition to course requirements and objectives that are in this syllabus, Montgomery College has information on its web site (see link below) to assist you in having a successful experience both inside and outside of the classroom. It is important that you read and understand this information. The****link below provides****information and other resources to areas that pertain to the following: student behavior (student code of conduct), student e-mail, the tobacco free policy, withdraw and refund dates, disability support services, veteran services, how to access information on delayed openings and closings, how to register for the Montgomery College alert System, and finally, how closings and delays can impact your classes. If you have any questions please bring them to your professor. As rules and regulations change they will be updated and you will be able to access them through the link. If any student would like a written copy of these policies and procedures, the professor would be happy to provide them. By registering for this class and staying in this class, you are indicating that you acknowledge and accept these policies.*

[**http://cms.montgomerycollege.edu/mcsyllabus/**](http://cms.montgomerycollege.edu/mcsyllabus/)

**Course Policies for Online Courses that Support this Course, cmsc140**

**Part 3 of the Syllabus**

**Getting Started**

This section explains the steps students should take to prepare for the online or blended course such as completing the online learning pre-assessment, printing the syllabus, and completing the orientation / Start Here module.

Are You Ready for Online Learning?

To find out take the Pre-Assessment Survey:

<http://cms.montgomerycollege.edu/distance/before/preassessment/>

See Prepare Yourself <http://cms.montgomerycollege.edu/distance/prepare/>

**Technical Requirements:** You will need the following to participate online:

* Regular use of a computer with Internet access.
* Expect to spend several hours online each week.
* A web browser such as Firefox, Chrome, or Internet Explorer.
* See Prepare Yourself  <http://cms.montgomerycollege.edu/distance/prepare/>
* It is highly recommending that you have internet access at home, however, there also are computer labs on each campus. See <http://cms.montgomerycollege.edu/oit/InTech.aspx?id=60795>

**To Login to Blackboard:** You will need:

* *Login to My MC at* <http://www.montgomerycollege.edu/>
* *Click the Blackboard Icon in the top right of the My MC homepage.*
* *You will be taken to your My Blackboard screen.*
* *On the Blackboard screen, click on the title link for a course to enter the course.*

**Blackboard Technical Support:**

The HELP link on the left‐hand course menu links to the **MC Blackboard Online Support Center**. Students can

* 1. Call the Support Center at 240‐567‐7222, or
  2. Chat with a service representative, or
  3. Submit a ticket.

Note:  Click the **My Support** link at the top of the Blackboard Online Support Center screen to view a history of your correspondence with the Blackboard Support Center.

**For assistance with My MC**

Contact the Montgomery College IT Service Desk at 240-567-7222

### 

**Class Announcements**

I will regularly post class announcements on the course homepage. You are expected to check the announcements several times per week. Old announcements will be archived in the Old Announcements section of the course.

#### 

**Q & A forum:**

When you have questions about assignments or other aspects of the course, do not email your questions to me unless the subject must be private.  Post your questions in the Q & A Forum in the discussions area.  I will check this forum regularly and answer your questions.    
Tip: Set the Q & A Forum to Show Unread messages.

**Backing up your work**

In this course you will complete most of your assignments on a computer.  You are responsible for ensuring the safety of your work by making regular backups (extra copies).  “The computer ate my homework, I lost my disk, my hard drive crashed, or my printer isn’t working,” are not acceptable excuses.  Make frequent backups of your work and save the work in multiple places.

**System Downtime**

The Office of Information Technology conducts computer network maintenance on Sunday morning from 12:01 AM to 6:00 AM (East Time) each week.  During this time you may be not be able to access My MC to login to Blackboard. Do not rely on this time to submit course work.

**Student email**

* Use Course Mail in Blackboard for all private communication.
* Use my Montgomery College e-mail [grigoriy.grinberg@montgomerycollege.edu](file:///D:\AGG_MC_COURSES_15_16_17_18_19_20\2017_2018_2019_2020\Fall21\Syllabus_Fall21\grigoriy.grinberg@montgomerycollege.edu) *only* if Blackboard is unavailable or you have emergency questions.
* It is expected that you check your student email frequently, as you are responsible for information and announcements that will be sent to you from the College.
* Generally, I will respond to e-mail messages within two business days.
* If a time arises when I will be unable to respond to email within two business days, I will let the class know.

**Submitting assignments electronically**

In this course you will submit your assignments electronically. Because technology can be unreliable when you least expect it, submitting your work on time may require some creativity.  Here are some alternate means to submit your assignments.

* Email your assignment directly to the instructor.
* If your email program isn’t working properly and you can’t access the course site, deliver the file on disk to the instructor’s office before the deadline
* Notify the instructor by email or telephone.
* There is always a means to submit your assignments on time.  Be creative, be persistent, and keep your instructor informed!

**Participation Rubric for Online Discussions**

For discussion contributions posted to the appropriate weekly discussion within the week assigned:

* Participant posted a response to at least one conference topics posed by the instructor for that week and wrote a substantive reply to the message of at least one classmate
* Comments or questions were responsive to the discussion questions
* Comments or questions significantly enhanced the quality of discussion (i.e. illustrated a point with examples, suggested new perspectives on an issue, asked questions that helped stimulate further discussion, etc.)
* Comments or questions provided evidence that the participant had read and considered a substantial number of classmates' postings before responding
* Ideas were expressed in a clear and coherent manner

**What is an Online Discussion?**

* An online discussion is similar to an email conversation with some important differences.
* An online discussion can involve a number of participants, such as a team of students or an entire class.
* All messages stay posted in the discussion board for participants to read and re-read at any time.
* An online discussion can last for a week or longer.
* If you are new to online discussions, you will find them as rigorous as any face-to-face classroom discussion.
* The purpose of a discussion is dialogue as a means of learning.

**Guidelines for Participating in an Online Discussion**

* You are expected to read all posted messages.
* Respond to each other promptly.
* Use the person's name when you reply to a message. It helps to keep all of us oriented. It helps us maintain a clearer sense of who is speaking and who is being spoken to. As we begin to associate names with tone and ideas, we come to know each other better.
* If you wish to send a private message, click Reply Privately. Your message will appear in the recipient's Blackboard email.
* Change the subject line of the message when you want to introduce a new topic. The value of this tip will become apparent as the number of messages grows.
* Feel free to reinforce each other's ideas with comments such as "Good Point" or "I agree" or "Thanks for the comments."  Note, however, that these comments do not count toward your grade.
* Avoid angry or rude comments. The use of sexist, racist, or objectionable language is not acceptable.
* Use emoticons to communicate humor, e.g. :-)   ;-)   :-0    :-/   :-(
* When you are writing for an online discussion, I strongly encourage you to compose your message in a word processor then copy and paste the text into the discussion message. Expect to spend time editing and revising your messages until they are clear. Composing your messages in a word processor first, will save you from losing your hard work if your browser crashes before you click the submit button.
* As a general rule, messages posted on the Discussion Board should be no more than a screen in length. If your message is longer, revise it to be more concise or separate your message into points and post each point as a separate message.