

**INFO.2110.061 Introduction to Programming with C - Part 1**  
**10-Week Accelerated Course**

## Instructor Information

**Instructor:** Bryant Moscon

**Contact:** UML policy is that all interaction for online courses takes place from *within* Blackboard, so please Mail me through this course website only. In case of emergencies, when Blackboard is down, the following contact information may be used:

Email: bryant\_moscon@uml.edu

I will check and respond to Mail from this class in the evenings, usually between 7 and 9pm. If the opportunity arises, however, I may check my Mail at various other times throughout the day. You can expect to receive a response within 24 hours.

***Tip:** Blackboard Mail can be accessed by clicking on the **Mail** link in your Course Menu on the left of your screen.*

## Course Chat Schedule

Weekly chats will be held on Sunday evenings from **8 – 9 PM EST**. We will be using Blackboard Collaborate Ultra for our weekly chats. Chat participation is *optional*, but highly recommended.

***Tip:** Blackboard Chat tool can be accessed by clicking on the **Chat** link in your Course Menu on the left of your screen. Simply click **Join Room** to participate.*

## Course Description

This course examines the ***fundamentals of computer programming*** and ***problem-solving techniques***. It offers an introduction to computer programming concepts, computer logic, memory, and input/output processing, all in addition to learning the marvelous ***syntax*** of the "C" programming language.

The syntax (the rules for writing the code of the C programming language will be introduced during the course to the point where you be learning fundamental construction of the language, as well as learning *good programming practices* (generally accepted industry standards). It's not just getting the problem correct - you must ***'look marvelous'*** too!

Specifically, we will cover the details of fundamental programming concepts such as:

**variables, data types, expressions, program looping structures, decision making structures, arrays, and functions.**

## Prerequisites for the Course

There are no academic prerequisites for this course.

## Course Materials Release Day

Each "week" of this course begins on a Monday, and ends on a Sunday, except for Week 1 which is sometimes a short week if the semester does not begin on a Monday. The course calendar at the end of this syllabus provides additional details with regards to the course schedule. Your final exam will be assigned during week 10. You can take your final exam at any point during that week. More details to follow.

Although we are online, this is a very structured class. You will need to stay self-motivated and participatory throughout the entire semester. I recommend setting aside at least 6 hours a week dedicated to this course.

## Student Requirements

### Required Activities:

- Read **on-line lecture notes** each week.
- Read assigned **textbook material** each week.
- Complete each of the **5 programming assignments**. (Each assignment is worth 15% of your course grade).
- Complete the online **final examination**. (The final exam is worth 25% of your course grade).

### Recommended (optional) Activities:

- Participate in weekly **chat** session. (Participation is optional but highly recommended to get the most out of the class.)
- Contribute to the course **discussion forum**. (Posting is optional, however, reading any existing postings is an important part of the course, and strongly encouraged.)

## Assignment Guidelines – Grading and Submissions

### Programming Assignments:

We will be using Blackboard's Assignment tool to submit all programming assignments. (Five assignments total). You will access the link to the assignment from with the weekly folders. The link will become available during the week that the assignment is assigned, and will be available until the cutoff date (1 week after the due date).

Your programming assignments are worth 75% of your total grade (15% each). The grading rubric for the programming assignments can be found in the “Start Here” folder in Blackboard.

### Final Exam:

Your final exam will be taken online, using the Blackboard test tool, and will be completely self-graded by Blackboard. That is, as soon as you submit your exam, your grade will be calculated, however note that you will not be able to see your grade or your results until after the availability period of the exam. You will be timed, and must complete the exam in a single seating. That is, you cannot "pause" the exam and return to it at a later time. The final exam consists of 50 questions, each worth 2 points, for a maximum total of 100 points per text. You will have 4 hours to complete each exam.

Your final exam is worth 25% of your total grade.

**Tip:** For additional details for using any of the above assessment tools, you can visit the **Blackboard Learn Tutorials for Students** link located in the upper right corner of your UML Online Learning page. The **UML Online Learning** page is the page that you land on when you first sign onto Blackboard. Or, you can access the UML Online Learning page by clicking on the link in the upper right corner of your screen at any time.

### How You Will be Graded:

**Your final course grade will be based on the following:**

Requirement	%Total Grade
5 Programming Assignments	75 %
Final Exam	25 %
<b>Total:</b>	<b>100%</b>

**Your final course letter grade will be determined as follows:**

<b>Numeric Grade:</b>	<b>Letter Grade:</b>
94-100	A
90-93	A-
87-89	B+
84-86	B
80-83	B-
77-79	C+
74-76	C
70-73	C-
67-69	D+
64-66	D
0-63	F

## Make-Up Policy

### Make-ups for exams:

There will be **no make-up** for the final exam, *unless prior arrangements have been made* with the instructor.

### Make-ups for programming assignments:

Programming assignments are due on the assignment due date. Two points will be deducted from the assignment grade for each day that it is late. The cutoff date for each assignment is 1 week after the due date, and assignments will no longer be accepted after that cutoff date. **A grade of 0 will be assigned if the programming assignment is not submitted by the cutoff date. The cutoff date for the final assignment and final exam is the due date. They will not be accepted late.**

*In cases of emergency, requests for make-up work may be discussed with the instructor and will be handled on an individual basis.*

## Course Materials

### Required Textbook:

**Programming in C**, by Stephen G. Kochan. It is the Fourth Edition, copyrighted in 2014.

**ISBN 10:** 0321776410

**ISBN 13:** 978-0321776419

Some of the examples in the required textbook are quite complex, even when introducing basic fundamental programming concepts. Please do not become discouraged as a result of the complex examples. I try to supplement those with more straightforward examples of my own in order for you to be able to spend your energy focusing on learning the concept being discussed, versus stressing over an overly-complex mathematical example in the textbook. If you find yourself confused by a programming example in the textbook, and really want to understand it, please direct your questions to the course discussion board, and I will attempt to answer it there for you as well as others to benefit.

**Note:** This same textbook will also be used in the **Programming with C - Part 2** online course (INFO.2120).

### Required C-Compiler:

A compiler is a program which converts the high-level code that we will be creating in this class (called *source code*), to a language that the machine understands (*object*, or

*machine code*). We will discuss compilers in more detail during "Week 1".

You will need an ANSI C standard compiler in order to compile your code. I am very flexible here. You can choose whichever compiler you'd like, so long as it is an ANSI C standard compiler. (ANSI is simply a national standard that the C syntax must follow -- again, more on this later).

For example, you can choose **C-Free** (*which is what I will be using*).

*Some alternatives are:* Microsoft's Visual C++ (more difficult to learn and use and usually it compiles in C++ mode – not ANSI C). Students in this class can obtain a free version of this compiler at: <http://continuinged.uml.edu/msdnaa.htm>

Mac users have used xCode in the past – but I cannot help with that product – I use a "PC".

**Note 1:** You can download "C" and/or "C++" compilers for FREE over the Internet, but be careful; they may not be "ANSI C" standard compilers, and may not work exactly as they should.

**Note 2:** All C++ compilers work with C code. However, there may be options that need to be selected to make the compiler compile in strictly ANSI. Usually you must name the files with a .c extension, and make sure you compile in ANSI C mode. Otherwise, you may have code that runs perfectly fine in C++, but does not compile or run in ANSI C on my computer.

If you have any problem trying to obtain a compiler for the course, please send me mail in Blackboard as soon as possible, so we can rectify the problem. If you have any problems or questions about your compiler, please post them in the discussion board, as I am sure others can benefit by your question and subsequent responses.

**Tip:** Details for obtaining the C-Free Compiler can be found in the **Start Here** folder on the course Home Page.

## Interaction Guidelines – Communication and Participation

Participation by both the student and instructor is vital for an online course to succeed. Since this is an "electronic classroom" all of our communication and participation will be handled, well, electronically. There are three (electronic) methods of communication available to us at this time. They are: Mail, Chat, and Discussion Forums.

### Mail:

Electronic mail (Course Messages Tool/Mail on the course menu) should be reserved for private or personal issues. You may Mail me at any time, and I will try to respond within 24 hours. I usually check my Mail by 8:00 each evening. Please note that Blackboard works with its own internal mail (course messaging) system, which means all messages are sent, stored and read within your course, not through your own external mail. To access Mail, you have to log on and go to your course, and click on the Mail link on the course menu on the left side your screen. It is recommended that you check your Mail at least once a day, so that you don't miss important course information. New Mail can also be found "My Messages" box on the UML Online Learning page when you login to Blackboard.

### Chat:

- Chat is voluntary for this course, but I highly recommend it in order for you to get the most out of this course. It is a "real time" discussion of issues relating to the course. For this course chat will take place on **Sunday from 8 - 9 PM Eastern Time.**

We will be using **Blackboard Collaborate Web Conferencing** for chat. It is an audio, video, and text-based chat tool. Feel free to turn on your mic and web-cam if you have one, or, if you'd prefer, you can simply use your keyboard and chat in a text-based **mode.**

Our **first chat** will take place on **Sunday, September 5th.** At first, chatting may seem a bit awkward; however, I'm sure you'll all be comfortable with it by the second chat! The chat tool is activated by clicking on the Chat link in the Course Menu on the left side of your screen, and then entering the room by clicking on **Join Room.** Each chat session will be recorded (archived) for future reference.

**I recommend attempting to access the chat room prior to our scheduled chat session.** Please check the **Blackboard Learn Tutorials for Students** link that provides help with Blackboard Collaborate, especially the first time you use it. The tutorials link in in the **UML Online Learning Tutorials and Tech Support** box when you log in to Blackboard.

### Chat room guidelines :

- Please keep subject matter related to course material.



- If text chatting, when you are "talking" to someone in particular, please begin

your statement with that person's name, followed by a colon. For example, if you wanted to ask John Smith a question, your statement would look something like:

"John: what do you think about..."

- Of course, no profanity. If profanity or any other type of harassment takes place, you will automatically be prohibited from entering any course related chat rooms in the future.

## Discussion Forum:

The course has a default Questions/Comments discussion forum, where you can post questions and/or comments throughout the semester. To access the course discussion board, click on the Discussion Board link in the Course Menu and then the Questions/Comments forum. I will be checking the Questions/Comments forum every evening, at around 8:00 to respond as needed. Please do not Mail me your questions (unless they are personal), because chances are, if you have a question related to Blackboard and/or the course material, someone else has the same question. Many students can benefit from your question, and subsequent answer. Also, feel free to respond to one another's questions. No need to wait for me!

**Tip:** For additional details for using any of the above interaction tools, you can visit the **Blackboard Learn Tutorials for Students** link located in the upper right corner of your UML Online Learning page. The **UML Online Learning** page is the page that you land on when you first sign onto Blackboard. Or, you can access the UML Online Learning page by clicking on the link in the upper right corner of your screen at any time.

## Students with Disabilities

UMass Lowell is committed to assisting students with documented disabilities by providing reasonable accommodations in all online courses. Students with documented disabilities should contact the Student Disability Services at: <http://www.uml.edu/student-services/Disability/default.aspx> or by calling: 978-934-4574.

## Academic Integrity Policy

UMass Lowell Online students are expected to be honest and to respect ethical standards in meeting academic assignments and requirements. A student who cheats on an examination or assignment is subject to administrative dismissal. Please visit the Web site (<http://continuinged.uml.edu/policies/academicintegrity.cfm>) for specific details regarding this policy.

## Netiquette

Netiquette stands for Network Etiquette. It refers to proper behavior while interacting online. The golden rule of netiquette is essentially to treat people as you would want

to be treated. Please be polite and considerate. Think about whether your comment could cause hurt feelings. Be careful about how your words can come across because misunderstandings can be common online. Feel free to use emojis to show your tone.

## Instructional Resources

My goal is to help every student in this class succeed. To this end I'd like to encourage you to use all available resources to help you achieve your goals. In addition to visiting with me during our weekly chat sessions, you should feel free to contact me via Blackboard mail and/or the Course Discussion Board. I am here to help, so please let me know if you need something. Additionally, the Division of Online and Continuing Education provides 24/7 Blackboard technical support.

**Tip:** Our 24/7 **Technical Support** is available to all students who are having technical difficulties with Blackboard. The Technical Support link is located in the upper right corner of your UML Online Learning page. The **UML Online Learning** page is the page that you land on when you first sign onto Blackboard. Or, you can access the UML Online Learning page by clicking on the link in the upper right corner of your screen at any time.

***Please scroll to next page for Course Calendar***

## COURSE CALENDAR

Week	Date	Required Reading	Assignments
1	1/18 - 1/23	Chapter 1: Introduction to ANSI C	
2	1/24 – 1/30	Chapter 2: Programming in C Chapter 3: Variables, Data Types, Expressions & Arithmetic Expressions	#1 Assigned – Due End of Week 3
3	1/31 – 2/6	Misc: C Standard Library	
4	2/7 – 2/13	Chapter 4: Program Looping	#2 Assigned – Due End of Week 5
5	2/14 – 2/20	Chapter 5: Making Decisions	
6	2/21 – 2/27	Chapter 5: Making Decisions (continued)	#3 Assigned – Due End of Week 6
7	2/28 – 3/6	Chapter 6: Arrays	#4 Assigned – Due End of Week 8
8	3/14 – 3/20	Chapter 6: Arrays(continued)	
9	3/21 – 3/27	Chapter 7: Functions	#5 Assigned – Due End of Week 10
10	3/28 – 4/3	<b>Final Exam Released</b> Reading: Chapters 1 – 7	Final Exam Due End of Week