

PROG 110 Introduction to Programming – Online Section

Instructor Sylvia Unwin

Office A254

Email Use Canvas Communication tool

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Office Hours Monday: 1:00 pm – 2:20 pm (N252 classroom for Open Help Sessions)

Wednesday: 10:00 am - 12:00 pm (campus office)

Additional times by appointment (Make appointments by emailing the instructor)

Required Text Microsoft Visual C# 2010: An Introduction to Object-Oriented Programming, 4th

edition, by Joyce Farrell. ISBN: 978-0-538-47951-6

Materials Storage device (USB drive recommended for transport)

Software Needed: Visual Studio 2010 – C# (available free from BC, starting day 1 of the quarter.)

Find the directions in the Getting Started area of the website.

Media Player, Adobe Reader (for videos, .pdf documents)

DESCRIPTION

This course is designed to introduce students to computer programming. Students will use **Visual Studio 2010** and **C#** to develop software programs while learning the *fundamentals of computer programming and efficient programming techniques*. Topics include: data types, calculations and data manipulation, sequence structures, decision structures, repetition structures, arrays, methods, object-oriented terminology, simple data validation. Students will design, code and test programs of increasing complexity during the course.

PREREQUISITES

- Placement by Assessment or course work into Math 141 (previously Math 105).
- Placement by assessment into ENGL& 101 or completion of ENGL 092 or 093 with C- or better and college level reading.

OUTCOMES

Upon completion of this course the student should be able to:

- Understand and use common programming terms.
- Correctly create and save projects
- Understand and use general programming techniques
- Plan and design an application
- Declare and use variables and constants correctly
- Use If and Switch statements to implement selection structures
- Use the For, While, and Do loop statement to invoke repetition
- Test and debug applications



- Use the Visual Studio 2010 integrated development environment to design, create and test C# applications
- [optional] Design and develop graphical user interfaces using forms, labels, text boxes, and buttons.

Note that this course is designed to teach beginning software development using C#.

COURSE REQUIREMENTS

Assignments – all but the Introduction are submitted using the Assignment Tool

- Post an Introduction on Canvas Discussion Tool an introduction of yourself to your classmates, posted in the appropriate discussion area topic on Canvas by the due date as shown in the calendar. For full credit, your introduction should answer the questions in the Getting Started Module. (10 points)
- **Programming Assignments** four to five programming assignments each worth various points, dependent upon complexity, 50 to 100 points.
- Questions on returned assignments Questions about your graded assignments must be
 received by me (via email) within three days of being returned to you. If further explanation or
 score changes need to be made, I will respond accordingly; after that requests for review will
 not be accepted.
- Chapter Review Questions to be completed using the Assessment tool when specified.
 These review questions are to ensure that you are caught up with the reading and engaged with the course discussions.

Exams

There will be two exams, a midterm and a final. These exams are open book and will be of a practical nature, meaning that you will be asked to write code and ensure that the program works. Exams are cumulative; although they will focus on the newer material, they assume knowledge from the beginning of the quarter including your textbook and discussion topics. Specifications will be listed in the appropriate discussion topic.

In case of emergency or other extraordinary circumstances, and with prior discussion with the instructor, arrangements may be made to take an exam at a different time, though the final exam may not be taken early. Scheduled dates are shown in the Course outline of this document and also on the **Calendar** of the course website.

Exams will be made available for a designated period of time with penalties for submission after the "due time" of one point per minute. In other words, manage your time during the allotted scheduled period. You are not allowed to discuss the exam material with anyone inside the class or outside the class; and you must do your own work.



Exam Coverage

| Exam 1 | Chapters 1, 2, 4 | Creating applications, data types, making decisions |
|------------------------|------------------|---|
| Exam 2 (Cumulative) | Chapters 5, 6, 7 | Looping, using arrays, and methods |

GRADING: Grades will be calculated as follows:

| Percentage | Grade | Points | Percentage | Grade | Points |
|------------|-------|--------|------------|-------|--------|
| 96 - 100 | Α | 4.0 | 76 - 79.9 | C+ | 2.3 |
| 92 - 95.9 | A- | 3.7 | 72 - 75.9 | С | 2.0 |
| 88 - 91.9 | B+ | 3.3 | 70 - 71.9 | C- | 1.7 |
| 84 - 87.9 | В | 3.0 | 66 - 69.9 | D+ | 1.3 |
| 80 - 83.9 | B- | 2.7 | 60 - 65.9 | D | 1.0 |
| | | | Below 59.9 | F | 0.0 |



PROG 110 - Tentative COURSE OUTLINE

| Week # | Topic(s) | Remarks |
|---------|---|-----------|
| 1 | Orientation with Course website | |
| | Introductions, ELMS, Visual Studio 2010 | |
| | A First Program Using C# | Chapter 1 |
| 2 | Using Data | Chapter 2 |
| 3 | Using Data | Chapter 2 |
| 4 | Making Decisions | Chapter 4 |
| | Campus Closed (Tuesday, 10/9) | · |
| 5 | Making Decisions | Chapter 4 |
| 6 | Looping | Chapter 5 |
| | Exam 1 (Friday-Sunday) | Exam 1 |
| | Chapters 1, 2, 4 (create programs, data types, variables, | |
| | making decisions) | |
| | Campus Closed (Friday, 10/26) | |
| 7 | Looping | Chapter 5 |
| 8 | Using Arrays | Chapter 6 |
| 9 | Campus Closed (Monday, 12/12) | |
| | Using Arrays | Chapter 6 |
| 10 | Using Methods | Chapter 7 |
| | Campus Closed (11/22-11/23) | · |
| 11 | Using Methods | Chapter 7 |
| 12 | Using GUI Objects | Chapter 3 |
| | Last day of Class (Tuesday, 12/4) | , ' |
| | Exam 2 (Wed – Fri) | Exam 2 |
| | Chapters 5, 6, 7 (Loops, Arrays and Methods) | |
| | 12/7 End of the quarter | |
| | Grades available 12/10/2012 | |
| | 1 | |

Note: Due to unforeseen circumstances and at my discretion, this syllabus is subject to change at any time.



POLICIES and NOTES

Class Support

- Students requesting assistance must be prepared to outline the steps the student has taken to solve the problem. For example, if a specific run-time error is occurring, the student must state the testing and debugging actions taken in an attempt to solve the problem. The point is, developing a competence in debugging code is a specific outcome for this course.
- Make an appointment to speak or see me during my office hours.

COURSE FILES

See classroom website.

WITHDRAWAL

Students are expected to be familiar with the college withdrawal policy and schedule, as shown in the <u>Enrollment Calendar</u>. Students not withdrawing will receive a grade based on the number of points earned divided by the total number of points offered for the quarter. Incompletes are not given. A grade will be reported for every student remaining on the class roster after the deadline to withdraw.

EXTRA CREDIT

There is none, so please don't ask. If you have spare time to do extra work, complete some of the exercises at the end of each chapter. The more you practice, the easier C# will become. Becoming proficient in programming is achieved by practice. The more you practice the more you will be able to easily apply skills and concepts to your applications.

LATE POLICY

Assignments other than exams may be submitted up to 3 calendar days after the published due date and time. Late submissions will be subject to **one grade level** reduction per day (or any portion of day) up to 3 days after the due date. (e.g. A to B to C) No assignment will be accepted after the final late date and time (3 days after the published due date and time). Late submission of exams is subject to a deduction of one point per minute. **End of quarter submissions will not have a late policy date associated with them, as no assignment will be accepted after the end of the quarter.**

MULTIPLE SUBMISSIONS - SAME ASSIGNMENT or EXAM

Homework assignments are set up so you can "take it back" *before* the due date and time. Exams are not set up that way. Sometimes students submit the wrong file or an incomplete file, and I send it back, requesting the correct file. This slows down the review of assignments for everyone in the class. It is expected that students will send the **correct project files**. Requests from me for updated submissions are subject to a **5** point deduction. Students are expected to send the correct exam file on their first submission.

CHEATING/GRADE INTEGRITY

Students are expected to conduct themselves with honor and integrity. If you choose to cheat and/or aid someone else in cheating, you violate a trust and jeopardize your future in this class. Cheating includes but is not limited to:

 Turning in assignments or exams that have been used in other classes, including a previous enrollment in this class by you or another person. All work is expected to be original work by



you

- Copying answers on any written or practical exam
- Two different people working together on the same assignment and submitting the same file (or portion of a file) from each person as individual work
- Giving and/or receiving help during an exam all exams are expected to be individual work
- Disk copying, purchasing/selling answers to any portion of the course
- Misrepresenting file creation dates in any way

If you cheat, some or all of the following actions may be taken:

- You will receive a grade of zero on the assignment or exam. This item may not be resubmitted for credit or review.
- A report of the incident will be sent to the Dean of Students who may file a report in your record and/or take other disciplinary action. For a description of the process, see WAC 132H-120, available in the Student Body Government office.
- If you are involved in more than one cheating incident in this class, you may be given an "F" grade for the course.

ACCOMMODATION

If you need course modifications / adaptations or accommodations because of a disability, please contact BC's Disability Resource Center (DRC). They are located in room B 132 or by phone 425.564.2498 or TTY 425.564.4110. Information is also available on their website at http://bellevuecollege.edu/drc/

If you have medical information to share with me, or any emergency that impacts your success in this class, please contact me as soon as possible. This helps me assist you appropriately.

MISCELLEANOUS NOTES

Keep backup (electronic) copies of all submitted work. Keep graded work until at least the end of the quarter.