

Course Number/Section and Title:		COMP 1200-01 Elementary Programming and Logic		
Semester and Year:	Fall 2015			
Course Meeting:	MWF Days	3:05-4:15 _{Time}	Towers 107B (computer lab) Location	
Credit Hours:	2	1	1	
	Total Credit Hours	Lecture Credit Hours	Lab Credit Hours (if applicable)	
Instructor: Pete Sanderson		psanderson@otterbein.edu		
First, Last		Email Address		

	Towers 125	823-1317	@DrPeteOU on Twitter	
	Office Location/Room #	Office Phone Number	Other Number or preferred contact information	
	10:00-11:00 MTWRF			
Set Office Hours (Days and Time) Also available by appointment.				

Course Catalog Description, including pre- or co-requisite course work or other required items. Lecture and Laboratory. An introduction to computer programming for non-computer science majors. Covers elementary logic, control structures, and simple user interfaces in Visual Basic (VB.NET) and Visual Basic for Applications (VBA).

Course Objectives (learning outcome goals or student learning outcomes for the course)

- You will be able to construct correct Visual Basic solutions to small and well-defined logic problems.
- Your solutions will have graphical user interfaces and employ event handlers.
- Your solutions will apply Visual Basic constructs for sequential, conditional and iterative logic.
- You will be able to work with numeric and character-oriented data values and collections.
- You will be able to compose procedures and functions.
- You will be able to utilize tools and techniques for composing, testing and debugging Visual Basic programs.
- You will know the basic principles and practices involved in developing software in general and object-oriented and event-driven software specifically.

Required Texts and/or Ancillary Materials

Starting Out With Visual Basic 2010, Fifth Edition, Gaddis & Irvine, Addison-Wesley, 2011. NOTE: A new copy of this book should include both a DVD and an access code to VideoNotes. If you buy it used, you may get either, both, or neither. Both the DVD and VideoNotes are useful but neither is required. The essential DVD resources are also available either from the Otterbein network's I drive folder for this course, the Blackboard course site or from the public website for this course, http://faculty.otterbein.edu/psanderson/COMP1200/

Attendance and Participation Policy

We will follow some active learning practices in the classroom and particularly in the lab, including collaborative activities and projects. Your attendance and participation is essential to not only your success but also to the success of your collaborators. You are however tuition-paying adults capable of assessing the consequences of not attending class and lab sessions. I do not assign points for attendance or participation.

Method for determining course grade

Your grade is based on a final course score in the range 0 to 400. The components of this score and their weights are as follows: midterm exams 80 (20%), final exam 80 (20%), programming challenges and projects 240 (60%). Ranges in the chart represent a 90-80-70-60 scale with 2% plus or minus on either side.

Range	Grade	Range	Grade	Range	Grade
368 - 400	А	320 - 327	B-	272 - 279	D+
360 - 367	A-	312 - 319	C+	240 - 271	D
352 - 359	B+	288 - 311	С	0 - 239	F
328 - 351	В	280 - 287	C-		

Assignments/Tests and expectations for out-of-class work

Exams: There will be two midterm exams and a comprehensive final exam. Exams cover lecture and textbook material, lab exercises, and projects. Make-ups will be scheduled only for documented emergencies.

Lab Exercises and Projects: I will assign individual laboratory programming exercises. They are intended to give you experience with and improve your skills in software implementation. Most will be selected from the Programming Challenges in the textbook. The rest are chapter capstone projects.

Deadlines for submitting work

Programming projects are assigned a due date and will incur a 10% per day penalty for late submission.

Final Exam Date and Time

Friday December 11, 11:15-2:15

Course, major, program or department-specific formats, policies and procedures, *as applicable* (e.g., specifics for field work, respect for others, lab safety, distance/online, discussion guidelines, student participation in co-curricular activities such as INST and FYS-approved events)

Does not apply.

Academic Honesty

This class may include both individual and collaborative assignments. In either case, you are encouraged to help each other learn the course material. Participants in these discussions enjoy the benefit of deeper and greater learning.

For individual assignments, the work you submit for evaluation must be your own; created by you while thinking it through. Any individual work submitted for evaluation (assignments and exams) that includes work done by another, copying of another's work, or the result of following another's step-by-step keystrokes and mouse clicks, violates the academic integrity policy of this course. For team assignments, the work you submit will be the product of the team. Taking credit for work that you did not participate in also violates the academic integrity policy of this course.

When academic misconduct occurs as described above, you will receive a zero grade for that assignment or exam. The misconduct may also be reported to the Office of Academic Affairs. If a previous academic misconduct offense is on your record, you will receive a grade of F for this course and a referral to the judicial system.

The complete statement on Plagiarism, Cheating and Dishonesty can be found in the <u>Campus Life Handbook</u>, page 33, at the following web link: <u>http://www.otterbein.edu/public/CampusLife/HealthAndSafety/StudentConduct.aspx</u>.

Learning Differences

If you have a documented learning difference please contact Kera McClain Manley, the Disability Services Coordinator, to arrange for whatever assistance you need. The Disability Services is located in Room #13 on the second floor of the Library in the Academic Support Center. You are welcome to consult with me privately to discuss your specific needs. For more information, contact Kera at <u>kmanley@otterbein.edu</u>, 614-823-1618 or visit the Disability Services at the following web link:

http://www.otterbein.edu/public/Academics/AcademicAffairsDivision/AcademicSupportCenter/DisabilityServices.asp <u>x</u>.

Statement on Credit Hour Definition/Expectation for Student Work

For each credit hour of classroom or direct faculty instruction, students are expected to engage in two hours of outof-class course-related work (readings, homework, studying, project preparation, etc.). Most Otterbein classes meet four hours per week in-class with expectation for an additional eight hours of out-of-class work for a total of 12. This class however combines lecture and lab activities, plus it is a two-credit course so the total is only six hours per week. Lab projects are designed to be mostly completed during the lab periods but depending on your learning style you will require varying amounts of additional time either in the lab during open hours or on your own computer. Since this course meets about four hours per week when combining lecture and lab, our expectation is you will spend an additional two hours per week in out-of-class course-related work. The following Fall 2015 schedule is approximate.

Week	Dates	Chapter	Topics	
1	Aug 24 - 28	1, 2	1.1-1.4: Intro to programming and VB1.5 & Tutorial 1: Intro to Visual Studio2.1 & Tutorial 2-1 thru 2-7: static VB program	
2	Aug 31 – Sep 4	2	 2.2 & Tutorial 2-8 thru 2-13: extend to respond to button 2.3 & Tutorial 2-14: modifying text property 2.4-2.8 & Tutorial 2-15: Message Boxes, debugging 	
3	Sep 7-11	3	No class Monday – Labor Day 3.1: More with strings, textboxes, concatenation 3.2: Variables and data types, assignment	
4	Sep 14-18	3	3.3: Numeric calculations3.4: Mixing data types, conversions3.5: convert numbers to text, formatting	
5	Sep 21-25	3	3.8: Group Box control to organize other controls Catch up and review Exam #1 over material covered so far	
6	Sep 28 – Oct 2	3	3.9: Event handler that runs when VB program loaded 3.10 & Tutorial 3-11: Room Charge application 3.11 & Tutorial 3-13: Debugging: stepping through a program	
7	Oct 5-9	4	4.1-4.2: Boolean expressions/operators, If-Then 4.3-4.5 & Tutorial 4-2 thru 4-4: more IF 4.6: Logical Operators	
8	Oct 12-16	4	No class Monday – Fall Break 4.7 & Tutorial 4-5: working with Strings 4.8: more on Message Boxes	
9	Oct 19-23	4	4.10 & Tutorial 4-8: Input Validation 4.11 & Tutorial 4-9: Radio buttons and check boxes 4.12 & Tutorial 4-10: building health club fee calculator	
10	Oct 26-30	5	5.2 & Tutorial 5-1: List Boxes, their use and properties Catch up and review Exam #2 over material since Exam #1	
11	Nov 2-6	5	5.3 & Tutorial 5-2 thru 5-5: Do While loop 5.4-5.5 & Tutorial 5-6 thru 5-8: Do Until and For Next loops 5.6 & Tutorial 5-9: Combo Boxes	
12	Nov 9-13	5, 6	5.10 & Tutorial 5-12: building vehicle loan calculator 6.1 & Tutorial 6-1 thru 6-2: Procedures and parameters 6.2 & Tutorial 6-3 thru 6-4: arguments, passing arguments	
13	Nov 16-20	6	6.3 & Tutorial 6-5: functions, return values 6.4: Debugging: Stepping into procedures and functions 6.5 & Tutorial 6-9: building bagel price calculator	
14	Nov 23-27	7	7.3 & Tutorial 7-5: menus No class Wednesday – Thanksgiving No class Friday – Thanksgiving	
15	Nov 30 – Dec 4	8	8.1 & Tutorial 8-1: Arrays8.2: using arrays8.3: Arrays with procedures and functions	
16	Dec 7-11		Catch up and review Comprehensive Final Exam: 11:15 am Friday December 11	