Course Credits Semester	CSI 1310, Computer Programming Section CSI 14438 Oakland University, School of Engineering and Computer Science 4 credits Winter 2018
Lecture	Mon/Wed/Fri 8:00-9:07 AM, 550 Engineering Center
Lecturer	Laura Dinsmoor Contact Information - Email: <u>dinsmoor@oakland.edu</u> Office: 518 Engineering Center Office Hours: by appointment
Teaching Assistant Required Book	Andrew Walwema, avwalwem@oakland.edu <u>An Introduction to Programming Using Visual Basic, 10th Edition</u> David Schneider (required) ISBN-13: 978-0-13-452158-9 (spiral bound) or <u>Introduction to Programming Using Visual Basic (E-Text</u> <u>Subscription), 10th Edition</u> David Schneider (required) ISBN-13: 978-0-13-452156-5

Course Websites Moodle: moodle.oakland.edu

Course Description:

Algorithmic programming using a high level, event-driven, language such as VB.NET. Topics include data storage and manipulation, graphical user interfaces, control structures, functions and sub procedures. Students cannot receive credit for either (ERG 1400 or EGR 141) or (CSI 1300 or CIT 130 or CSE 130). Offered fall, winter. Intended for Information Technology majors and minors. (Formerly CIT 131)

Prerequisite(s): (MTH 0662 or MTH 062).

Course Objectives:

The successful completion of the course should provide you with skills to analyze problems and to develop and code simple algorithms. The list of course objectives is as follows:

- Students will be able to develop applications using controls on a form, such as buttons, lists, combo boxes...etc.(a)
- Students will be able to create variables and define constants to collect input and program simple arithmetic statements.(a)
- Students will develop a skill set to solve problems using a computer, using the program development cycle, the programming tools including flowcharts, the pseudo-code and the hierarchy chart.(a,h)
- Students will create Visual Studio programs that demonstrate the use of relational operators, how to control the flow of a program with conditional statements, and implement loops, arrays for data manipulation.(a,h)
- Students will create applications with multiple forms, modules and Menus.(a,h)
- Students will develop skills on how to save data to sequential text files and then read the data back into application. They will also write programs to implement File Dialog.(a,h)

ABET Student Program Outcomes:

a) An ability to apply knowledge of computing and mathematics appropriate to the discipline;h) Recognition of the need for, and an ability to engage in, continuing professional development;

Course Delivery:

While this is not specifically an online course, some portions of the course utilize online programs. You will need to use the lab computers to do homework or (if you have one) your own computer, outside of class time to complete assignments and possibly watch videos. Visual Basic 2015 is not available on all the PC's on campus. Therefore, please plan your work accordingly. I will try to post all class videos online. Since this is not an online course, I cannot guarantee the availability of the videos.

Moodle is the tool I use for our class web page. I will be posting important notes to the class, exam dates, homeworks, and class examples on our web page. It is your responsibility to read it throughout the week.

Slides are provided on Moodle if you'd like to print them out to take notes on during class. I recommend you bring your textbook to class to work on the exercises.

Homework Submissions:

All Homework assignments will be submitted using Moodle only. <u>Homeworks submitted late</u> will have the grade greatly reduced for every 24 hours late. For example if it is due Sunday at 11 PM, if you turn it in before Monday at 11 PM you will lose 35% of the grade. If you turn it in my Tuesday 11 PM, you will lose 70% of the grade. If you turn it in after that you will get zero points. There are no excuses accepted for late homeworks. Do not wait to the last minute to do your homework, because PC and network problems are not excuses for late homework. After the second homework, if the homework is zipped incorrectly, you will receive a zero for the homework. Please read the following carefully to learn how on how to name your homework folder. Homework #-FirstName-LastName Example: Homework1-John-Smith.

Homework Questions:

Questions regarding the homework assignments should be posted to the Moodle homework forums, or addressed during office hours. Homework questions received via email will not be answered. While we will do our best to answer them within 24 hours, we have until 48 hours to answer them, therefore do not wait until the day the homework is due to post questions. In addition, please review other postings first to see if your question has already been answered. **You may answer other student's questions, but posting of the answer (code) is not allowed and will result in the person posting getting a zero on the assignment.**

Exams:

There will be three exams this semester. (The final exam counts as one of the three.) Exams will be multiple choice. You must bring in an OU picture ID and a pencil. I will provide the Akindi form. You may bring in a double sided 8.5" x 11" sheet of paper with notes, or two single sided papers with notes of the same size.

<u>Make up exams are not given for unexcused absences.</u> Excused absences require documentation from a hospital, doctor, police report, or similar. This documentation must be submitted within one class periods of the exam, unless your reason for being out prevents you from coming into school in which case someone designated by you needs to notify me within three days.

Attendance:

Attendance is not mandatory, but it is assumed you will attend all classes unless you have an emergency. Attendance will be used for extra credit, but only if you attend a **majority** of the class sessions. Attendance is taken at 8:00 a.m. If you arrive after that you do not get attendance points for the day unless severe weather prevents you from arriving on time. Attendance is only given for those in class, and absence due to sports, illness, etc. will not be given attendance credit.

Grading:

The following scale will be used for determining final grades. Grade = Percent Score/16 - 2

Grade Weighting	Weighting
Pop Quizzes in class	5%
Homework	10%
Exam 1	25%
Exam 2	30%
Exam 3	30%

Required Technology and Computer Knowledge

You are expected to have a moderate level of computer proficiency in order to take this course. You should already be comfortable doing all of the following:

- Using your chosen computer operating system and a web browser that works with Moodle
- Following online directions for using a new program
- Ability to install software on your computer
- Troubleshooting basic computer problems
- Working through problems you can't resolve on your own with remote support technicians

Technical Assistance:

For Moodle technical issues that you cannot resolve on your own, please contact the e-Learning and Instructional Support office:

• Phone: (248) 370-4566

For general PC issues call the OU Helpdesk

• Phone: (248) 370-HELP

For questions regarding programming software install please contact the SECS Technology Helpdesk

• Phone: (248) 370-2216

Software Requirements:

This class requires you to do homework with Visual Studio 2015. If you do not have it you can use the pc's in the EC building, or install it on your own PC for free. (Link is provided on Moodle page.)

EC labs and computers:

In order to use the PC's in the Engineering Center, you need to have an account to access those computers; your Sail ID will not work to log on to those computers. I will request an account for students registered by January 2nd. If you register after that, please submit a request using this link: <u>https://www.oakland.edu/secs/student-resources/</u>

To get into the EC building on weekends, or the labs in the EC any day you must know the last 4 digits of your Grizz ID, and have your student ID card. Card scanners next to the doors have instructions posted on them. Please test your card by the second week of class to verify it works. If it doesn't, it is your responsibility to demonstrate it before or after class to Professor Dinsmoor immediately.

Academic Conduct:

Cheating is a serious academic crime. Oakland University policy <u>requires</u> that all suspected instances of cheating be reported to the Academic Conduct Committee for adjudication. It is assumed that ALL WORK THROUGHOUT THE TERM IS YOUR OWN! <u>Discussion of homework assignments is permitted but copying of assignments or parts of assignments is not!</u> Handing in a homework assignment that was essentially copied from someone else does constitute cheating. All cases of suspected cheating will be turned into the Academic Conduct Committee for review.

<u>Submitted homework must make use of syntax we discuss in class, or student must be</u> prepared to explain how they wrote their code.

In the case a student is found responsible for academic misconduct, the student may receive a zero for the course or the assignment.

It is your responsibility to keep your files safe so others cannot copy them and turn them in.

Participant and Facilitator Expectations

Participants are enrolled into this course as a student participant role. There are assignments throughout the course with specific due dates.

Course participants are expected to:

- Ensure that their computer is compatible with Moodle.
- Attend all lectures and attempt code samples demonstrated in class
- Login into Moodle weekly to review and submit assignments
- Learn how to properly zip and unzip Visual Basic Projects before the second assignment
- Read and respond to emails within 3 days
- Participate in a thoughtful manner
- Respect rules of netiquette
 - Respect your peers and their privacy
 - Use constructive criticism
 - Refrain from engaging in inflammatory comments.

Behavioral Contract during Lecture hours:

• We will use the EC550 pc's for our programming exercises in class. Students are expected to use the pcs and their laptops for the CSI 1310 class material only during class.

The course instructor will:

- Meet with students within 3 days of requesting an appointment
- Grade exams within one week of the exam
- Will attend all class sessions or provide a person or video back-up if not present

The course teaching assistant will:

- Login to the course once a day Monday Friday to read to forum questions
- Respond to forum questions within 1-2 days
- Grade homework before the next homework is due

Advice for doing well in this course

As with any course you must be disciplined with your studies. You are in control of your study plan. Many students fall behind (or fail the course) because they haven't set up a weekly study plan. I recommend that at the beginning of every week you review the material and schedule so that you can see what will be expected of you for that next week. Then, choose days that work with your schedule that you can set aside each week to work on the assignments – stick to this and you likely won't miss assignments or fall behind in the course.

• <u>Read your book and practice book exercise if you do not understand a topic the day</u> <u>its taught.</u>

- Use the Internet to review additional resources to learn a topic.
- Review the assignments when they are initially assigned (even if you don't have time to work on them right then). This way you can plan out your week and get your questions answered early in class or by appointment.
- Don't wait until the last minute to work on an assignment. Make sure you have all of the necessary installations completed well before so you have time to get issues fixed should they arise.
- Review the videos if you don't understand a topic.

Inform your instructor of any accommodations needed:

Please email or see the instructor by September 15th if you have a documented disability and verification document from the Student Disability Services.

www.oakland.edu/dss

Class Schedule:

Please refer to the following for official add/drop dates, holidays, etc: <u>https://oakland.edu/registrar/important-dates/</u>

- Adjustments to the schedule will be made as needed and updates will be discussed in class and via Moodle.
- OU will be closed Monday January 15th, and February 19-23rd.

Week of	Chpt	Tentative Topics
3-Jan	2	Course Introduction. An Introduction to Visual Studio 2015
8-Jan	2	Visual Basic Controls
15-Jan	1,3	No class Monday, Program Development Cycle, Programming Tools, Variables
22-Jan	3,4	Input and Output, Relational and Logical Operators
29-Jan	4	If Blocks
5-Feb	4	Exam 1 this week, Select Case Blocks
12-Feb	5	Function Procedures , Sub Procedures, Part I, Part II, ByVal vs ByRef
19-Feb		OU CLOSED FOR WINTER RECESS
26-Feb	5,6	Scope & Lifetime of Variables, Do Loops
5-Mar	6,7	ForNext Loops List Boxes and Loops
12-Mar	7	Exam 2 this week, Arrays
19-Mar	7	Arrays
26-Mar	7, 8	Arrays, Text Files
2-Apr	8,9	Text Files, Structured Exception Handling, Other Controls & Additional Forms
9-Apr	9, 11	Object-Orientated Programming
16-Apr		Review, last class Monday April 16th
23-Apr	Final exam, our room, 8 a.m.	