Syllabus

CS2453 - Visual Basic 2012

Sections – TC01S and TX01S

Spring 2017

Instructor Information:

Name: **Sara Mathew**

Phone: (405) 682.1611 xtn 7236

Email: For all class correspondence, please use the email feature in Moodle.

If Moodle is down, then you could email me at sara.p.mathew@occc.edu

Office Location: Room 311, Library Building

Office Hours:

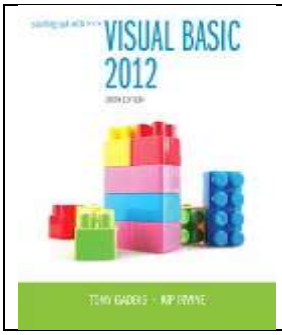
MONDAY	9 -10am (ONLINE)
TUESDAY	8:30am – 9:30am 1:30pm - 4:30pm
WEDNESDAY	10am – 1pm
THURSDAY	8:30am – 9:30am 1:30pm - 4:30pm

Class Information:

Class Sections: ***CS2453 –TC01S (Tuesdays and Thursdays 11am – 12:20pm)***

CS2453 –TX01S (Online Section)

Text:



Starting Out with Visual Basic 2012, Sixth edition

Author*:* Tony Gaddis and Kip Irvine
Publisher: Addison Wesley Publishing
(ISBN 10: 0133128083 / ISBN 13: 9780133128086)

Materials:

An access code should be on an insert in the front of the text. This code gives you access to the book's Companion Website. This website gives you access to student support areas that may include VideoNotes, Appendices, SourceCode and PowerPoint Slides.

Visual Studio Software

The textbook is bundled with Microsoft Visual Basic 2012 Express Edition. The full standard version of Visual Studio (including MSDN) is available for copying in the Student Computer Center. To make your copies bring 1 blank DVD-R and a valid student ID so the staff can verify that you have enrolled in this course, and the staff will get you a copy of the software.

System Requirements

Supported operating systems

- Windows 7 SP1 (x86 and x64)
- Windows 8 (x86 and x64)
- Windows Server 2008 R2 SP1 (x64)
- Windows Server 2012 (x64)

Supported architectures

- 32-bit (x86)
- 64-bit (x64)

Hardware requirements

- 1.6 GHz or faster processor
- 1 GB of RAM (1.5 GB if running on a virtual machine)
- 10 GB of available hard disk space
- 600 MB of available hard disk space (language pack)
- 5400 RPM hard drive
- DirectX 9-capable video card running at 1024 x 768 or higher display resolution

System requirement details can be accessed at http://www.microsoft.com/visualstudio/eng/products/visual-studio-professional-2012#product-edition-professional

College Resources:

(Note : The campus is closed on Sundays)

College Website: http://www.occc.edu/

Student Handbook: http://www.occc.edu/handbook/index.html

Student Computer Center: http://www.occc.edu/it/scc.html

Library: Room 322 ***(Valid Student ID required)***

Testing Center: http://www.occc.edu/testing/index.html

(Valid Student ID required) Note : Must be in Test Center at least one hour before closing.

Online Student Resources:

http://www.occc.edu/onlineresources/index.html

Student Support Services

Check out what services are available and contact Student Services at 405-682-7520

http://occc.edu/support/index.html

Course Description:

The students will use Visual Basic to create object-oriented, event-driven programs. This course teaches the students to handle the visual interface and also learn programming concepts that include objects, decisions, loops, dialog boxes, arrays, menus, subs, functions, files, simple data access and various other programming topics as they apply to Visual Basic.

Course Competencies:

Students who successfully complete the course will:

1. Be able to create programs to solve business and personal computing problems. This would include
    - Creating logical solutions using standards, conventions, and best practices.
    - Creating applications with graphical windows, dialog boxes, and menus.
    - Creating, testing, and enhancing applications.
    - Explaining and utilizing the fundamental concepts of OOP.
    - Creating introductory level applications that interact with databases.
    - Creating introductory level Web applications.
    - Utilizing basic programming concepts using the .NET environment.
2. Be experienced in meeting deadlines, adhering to project specifications, and attending required meetings in a timely manner.

Course Objectives

Students who successfully complete the course will be able to create programs to solve business and personal computing problems.
This would include being able to:

1. Chapter 1: Introduction to Programming and Visual Basic
    1. Describe programming and the programming process
    2. Explain Object-oriented and event driven programming
    3. Define key terms such as keywords, variables, operators, flowchart, pseudocode, etc.
    4. Learn about controls and programming
    5. Navigate the Visual Basic environment.
2. Chapter 2: Creating Applications with Visual Basic
    1. Add controls and modify their properties.
    2. Create event procedures
    3. Displaying user messages
    4. Use the Help system to learn to debug programs.
    5. Debug applications
3. Chapter 3: Variables and Calculations
    1. Effectively create, use and type variables and constants.
    2. Scope of variables and constants.
    3. Gather text input.
    4. Create mathematical statements to solve a problem.
    5. Formatting numbers and dates
    6. Group controls.
    7. Write simple exception handlers.
    8. Locate and debug logic errors.
4. Chapter 4: Making Decisions
    1. Effectively use relational and logical operators.
    2. Create EFFICIENT selection structures.
    3. Input validation
    4. The If statement
    5. The Select Case statement
    6. Create and code radio buttons and checkboxes.
5. Chapter 5: Lists and Loops,
    1. Create input boxes.
    2. Create and code list and combo boxes.
    3. Create EFFICIENT iteration structures.

4. Loop structures – Do While, Do Until and For...Next loops
5. Utilize counters and accumulators.

6. Chapter 6: Procedures and Functions
    1. Modularize programs with procedures and functions.
    2. Create arguments and pass parameters.
    3. Return values from functions.
    4. Debug programs using step into and step over.
7. Chapter 7: Multiple Forms, Modules and Menus
    1. Create and display multiple forms.
    2. Efficiently use standard modules.
    3. Create and code menus, submenus and context menus.
8. Chapter 8: Arrays and More
    1. Create single and multidimensional arrays.
    2. Array processing techniques.
    3. Procedures and functions that work with arrays.
    4. Utilize parallel arrays.
    5. Code the timer control.
    6. Anchor and dock controls.
    7. Create random numbers.
9. Chapter 9: Files, Printing, and Structures
    1. Use files
    2. Save data to and read data from sequential files.
    3. Utilize Common Dialog controls.
    4. Create printed output using the PrintDocument control.
    5. Create user-defined data types with structures.
10. Chapter 10: Working with Databases
    1. Database Management Systems and Concepts
    2. Use the DataGridView to display data from a database.
    3. Use data bound controls
    4. Write applications that display, sort, and update database files.
    5. Create and use simple SQL commands.
11. Chapter 11: Developing Web Applications
    1. Create ASP.Net applications.
    2. Use Web server controls.
    3. Create interactive web forms.
    4. Create database-driven web applications.
12. Chapter 12: Classes, Collections, and Inheritance
    1. Create a class
    2. Analyze a problem to determine the required classes.
    3. Create objects, properties, and methods.
    4. Define and utilize inheritance.
    5. Create Collections.
    6. Utilize the Object browser.

Global Awareness

Visual Basic is a programming language that is used throughout the world. When students search online for answers, they may be communicating with programmers and developers throughout the world. In addition, the first programming assignment requires them to use the flags of other countries.

Assessment of Student Learning

Oklahoma City Community College is committed to providing quality educational experiences to all students and to strive for continuous improvement in its programs and services. Student learning assessment is vital to the educational process and can be of significant value to you and to the students who follow you as well as contribute to their education success.

To ensure that adequate assessment information is available to allow OCCC to continuously improve programs and services, students may be asked to participate in personal interviews; take program and/or general education assessments, which could be to take tests; give oral presentations, write assignments, take surveys, or engage in other activities. You may be asked to complete the assessments, tests, and other activities during a designated times, which may include class periods in a semester. These opportunities are your chance to help OCCC improve the courses, programs, and services which could affect you and will certainly impact students in the future.

Class Requirements

The on-campus class will be taught in a computer-equipped classroom. Students will be given programming assignments. It is the student's responsibility to arrange his/her schedule for completion of assignments outside of class periods. It is of utmost importance that students stay current and turn all work in on time. Class material will be presented on-line. It is the student's responsibility to check for new assignments, class announcements, due dates, etc. Completed work will be submitted on-line through MOODLE. Both campus and online students can have access to the Student Computer Center.

Class Policies(On-Campus classes)

- In respect for the instructor and fellow students, cell phones, pagers, etc. are to be turned off or placed on vibrate during the class. If there is an emergency situation requiring availability via a cell phone/pager, please let the instructor know at the beginning of that class period.
- Students may NOT surf the net, check email, text or engage in similar activities during class time. Not only does it affect the person doing it, but it is a potential distraction to others in the class.
- The information on Moodle is meant for use only by students currently enrolled. Students may NOT give access to their accounts to individuals outside of this class. Failure to abide by this additional requirement could result in loss of your Moodle account, failure in the class, or other appropriate action.
- Students must abide by the College's Information Technology Resources Acceptable Use Policy.

Attendance

On Campus

Students need to attend class regularly to achieve an acceptable level of competence. Students who miss more than 25% of the class will not be able to satisfactorily complete the course and will receive a grade of 'F'. If you miss class, it is your responsibility to get the notes and assignments from the day you missed. You will be expected to hand in any assignment given during your absence, on the regular due date.

Online

Students are expected to login at least once a week to keep up with the lessons, quizzes and assignments. Students who have not logged in at least once for 25% or more of the weeks will receive a final grade of 'F'.

On Campus and Online

Requests for an exception must be made in writing to the instructor stating the conditions surrounding the reason for the request. Only under extenuating circumstances (for example, extended hospitalization or death in the family) will the instructor consider granting the request.

Withdrawals and Audits

Instructors cannot administratively withdraw students for non-attendance or because of a failing grade. It is the student's responsibility.

If you stop attending and do not plan on finishing the course, you must withdraw yourself from the course by the end of the 12th week of a 16-week semester or ¾ of the duration of class. Withdrawal deadlines are published in the College Class Schedule. When you withdraw from a course, the grade on your permanent transcript is a "W" (Withdrawn). The grade of "W" has no impact on your grade point average.

Failure to withdraw will mean the instructor will calculate your final grade as indicated in the syllabus (which may include an attendance requirement). If you stop attending and fail to withdraw, you will more than likely receive a failing grade. This failing grade will be placed on your permanent transcript and will be used in the calculation of your grade point average.

This notice supersedes all course syllabi, the College Catalog, the Student Handbook, and all other publications regarding Administrative Withdrawals (AW) by faculty for attendance.

Students who audit the course are expected to participate in the course the same as credit seeking students. This includes attending class and submitting assignments. (Audit students may not take the tests.) Failure to actively participate in class or missing more than 25% of all classes in case of on-campus classes or in the case of online students, have not logged in at least once for 25% or more of the weeks, may result in being administratively withdrawn by the instructor. This administrative withdrawal applies to ONLY to students who audit a course.

Grading Criteria and Procedures

This is the tentative grading scheme. They may be changed at the discretion of the instructor.

3 Tests	~450
Assignments and Programs	~570
Quizzes	~130
Total	**~1150**

A (4.0 Grade Point)
The sum of the test and assignment scores must be 90% or better of the total possible points

B (3.0 Grade Point)
The sum of the test and assignment scores must be 80% or better of the total possible points

C (2.0 Grade Point)
The sum of the test and assignment scores must be between 70% and 79% of the total possible points

D (1.0 Grade Point)
The sum of the test and assignment scores must be between 60% and 69% of the total possible points.
This grade level does not satisfy Computer Science course prerequisites.

F (0.0 Grade Point)
The sum of the test and assignment scores is below 60% of total possible points

Programming Assignments:

It is the student's responsibility to determine that his/her program produces the correct output and meets grading standards prior to submitting the program for grading. When naming Visual Basic projects, the name must include the student's last name (for example, Mathew_Program1.vb). Program assignments will be graded based on structure, application of appropriate technique, documentation, correct output, and meeting scheduled due dates. A program that runs, but does not meet the above criteria will not be eligible for full credit.

Each project must be submitted as a zip file in compliance with the assignment instructions. Only assignments in this format will be graded. Submitting the assignments will be done through the Program Drop Box feature of MOODLE. It is a two step process. The first step is to upload the zip file which contains your project. This may be done multiple times. When the final version has been uploaded, then step two may occur. The assignment must be submitted by the due date and time. When the deadline arrives, the server will no longer accept uploads and the assignment can no longer be submitted. Keep in mind that the time on the server is controlling. If your computer's clock differs, be sure to allow for the variance.

Assistance with Assignments:

In addition to my being available during office hours and via email, the Student Computer Center staff and tutors are also available for assistance. While some of the best learning takes place when we solve problems ourselves, please do not wait until it is too late. Ask for help when you need it. They will be happy to explain concepts and procedures.

A list of the full time staff can be found at the following URL. There are also other tutors and supplemental instructors available depending on the semester. Check with the Student Computer Center for details. Information can be accessed at: http://www.occc.edu/it/Lab-Staff.html

Due Dates:

All assignments are due by the posted due date. Due dates will be posted as and when the assignments are assigned. If there are extenuating circumstances, each situation will be reviewed on an individual basis only if requested by the student. Programs that will not run, that produce incorrect results, are partially completed, or not running according to the assignment specifications will be eligible for a maximum of 50% credit. Programs that are submitted late or as resubmits will be eligible for a maximum of 90% credit.

Be sure to check the Assignment Drop Box on Moodle for due date information. The time on OCCC's server will be the "official time". If your computer's clock varies from the server, the server's clock will be the controlling factor. When the due date and time arrives, the server will no longer accept submissions. (All programs must be uploaded and submitted. I will not have access to Assignments which have been uploaded, but not submitted)
ASSIGNMENTS WILL NOT BE ACCEPTED MORE THAN ONE WEEK LATE. Requests to submit an assignment late with no penalty will be considered based on written documentation of a valid reason, such as extended illness or death in the family, or military duty which must be received within 24 hours of the due date/time. Absence, technical problems, and/or undocumented personal matters do not excuse late work. You should make every effort to complete class work early. Those who wait until the last minute risk delays with the computer facilities (i.e., Moodle being down, e-mail problems, clock disparities, computer crashes, etc.).

Testing Dates:

If you are unable to take a test or a quiz at the designated time, you must make arrangements with the instructor. This must be done **before** the posted test deadline. Only under very extreme circumstances will a student be allowed to schedule a makeup test. Retesting to improve an exam score will not be allowed. Test may be a combination of theory and performance. Specifics will be announced prior to each test. Usually the theory will be multiple choice, true/false, or short answer. Performance tests will consist of writing program code.

Academic Dishonesty

~~ Just Don't ~~

Anyone caught cheating on a test or an assignment will **automatically receive a zero**. It does not matter whether you are **giving or receiving** the information. Either way, your grade is zero. A second occurrence of academic dishonest will result in **failure in this course**.

In accordance with official college policy, all incidents of academic dishonesty must be reported to the division dean and vice president for academic affairs.

Students are encouraged to discuss Visual Basic concepts and share ideas with fellow students. However, each student MUST create his/her own programs. **All code must be original and may NOT be copied from any source.** Any evidence of shared or copied work will be considered plagiarism and will be treated as cheating.

Issuance of Grades

Grades will be posted in MOODLE at http://online.occc.edu/. Check the grades area after each assignment has been graded. Students have one week after the grades have been posted to challenge a grade. Failure to request the review in a timely manner or to provide requested information will result in the grade remaining as originally posted.

It is highly recommended that all graded assignments (for all classes) be saved until after the final grade has been posted.

Email Address Request

The college provides students with an email account. For more information **http://www.occc.edu/email/.** In addition, each student is requested to send an email to the instructor within the first week of class. It should be from an email address which the instructor can use to contact the student in case MOODLE is down, change in class schedule, job opportunities after the semester has been completed, etc. More than one email address may be sent. The subject of the email should be **CS2453: Fall 2016-YourLastName, YourFirstName** Send the email to sara.p.mathew@occc.edu.

Pregnant and Parenting Students

Oklahoma City Community College does not discriminate against any student on the basis of pregnancy, parenting or related conditions. Pregnant or parenting students seeking accommodations should notify your professor immediately. For purposes of this notification, "parenting student" means a student who is pregnant or has recently been pregnant, or another student in a parenting role (regardless of gender), who is participating in a pregnancy-related or birth process.
Pregnancy-Related Absences: When a doctor determines absence is necessary, absences will be excused for students who are pregnant or parenting for as long as the student's doctor determines. Reasonable time will be given to make up missed work.
Title IX Coordinators: OCCC has designated a Title IX Coordinator, Regina Switzer (405-682-7540), and a Deputy Title IX Coordinator, Christina Atencio, (405) 682-7813. Either may be contacted when a pregnant or parenting student needs assistance in understanding or protecting the students' rights under Title IX. Kendra Fringer (405-682-7523), who serves as a Title IX Advocate, will also be happy to assist students with needs for accommodation that arise due to pregnancy.

Accommodation Statement

Oklahoma City Community College complies with Section 504 of the Rehabilitation Act & the Americans with Disabilities Act. Students with disabilities who seek academic adjustments/accommodations must make their request by contacting the office of Student Support Services located on the first floor of the main building near SEM entry 3 or by calling 405-682-7520. All academic adjustments/ accommodations must be approved by Student Support Services.

If you have been approved by Student Support Services to receive academic adjustments/accommodations you must talk with me either after class or during my office hours. This will allow me to be better informed on how to assist you with access during the semester. To respect your privacy I will not approach you, but the academic adjustments/accommodations must be discussed to ensure ideal implementation for you. All information will remain confidential.

Disclaimer

The assignments, point values, schedule, and testing dates presented in this syllabus are subject to change in the event of extenuating circumstances or if class progress warrants. Adjustments may be made as the semester progresses.

SAFETY AND SECURITY EMERGENCY PROCEDURES

The health and safety of all our students, faculty, and staff are OCCC's prime concern. The procedures outlined below are designed to deal with emergencies of various types. Students should always follow the lead of their instructors.

Fire

First notification will come from the fire alarm horns, sirens, and strobes. The class should gather their belongings, exit the building using the nearest exit, and move to a parking lot. *Do not use the elevators.* No alarm should be treated as a false alarm. Horns, sirens, and strobes are only used for fire alarms.

Fire (Special Considerations)

If someone in your area is not physically capable of descending the stairwell, please ensure that they remain in the *"area of safe refuge"* located just inside each upper-level enclosed first stairwell. There are emergency phones located near each of these areas.

Medical

For all medical related issues push the "*emergency"* button located on each classroom phone. The phone will display your room number, allowing for fast response to your location. All security officers are trained as first responders and will assist in guiding EMSA to your location. Treat all bodily fluids as if they were contaminated.

Bomb

If you receive a bomb threat, document as much information as possible and push the *"emergency"* button on the phone. If the decision to evacuate is given, the phone will *sound* an alarm and *display* a text message. The class should gather their belongings, exit the building using the nearest exit, and move to an open grassy area. Please turn off *all* wireless devices. (Cell phones, radios, laptops, and other portable devices.)

Weather

Tornado warnings that include OCCC will be sent directly to the classroom phone. The phone will *sound* and alarm and *display* a text message. The class should gather their belongings, move away from exterior glass and exits, and move to safer areas. These areas are lower-level interior classrooms, restrooms, and stairwells. You should familiarize yourself with the safer areas near your classroom(s). If the city/county sirens are sounding and OCCC is *not* in the warning area a message will be sent to the classroom phone advising this information.

Disturbance/Threats

If someone is causing a disturbance in a classroom, call security immediately. Push the *"emergency"* button located on each classroom phone. Distance yourself from that person, do not place yourself in the person's exit path and remove all potential weapons from the area. **Shelter in place:** If there is an armed person or shooter on campus: Close and lock your hallway doors. Turn off the lights, shut the blinds or move away from exposed areas. Use desks, tables and other objects to provide protection. Updated information will be sent to the classroom phone.

Tentative Course Calendar on next page

Tentative Course Calendar

Dates and Assignments may and will be changed as class progress warrants. Actual due dates will be available in the Moodle DropBox, Assignment, and Calendar/Due Dates areas.

Week	Topic
1 Jan 17 No class on Jan 16 – MLK Day	Syllabus, MOODLE Orientation **Chapter 1**: Introduction to Programming and Visual Basic
2 Jan 23	**Chapter 2**: Creating Applications with Visual Basic
3 Jan 30	**Chapter 3**: Variables and Calculations
4 Feb 6	**Chapter 4:** Making Decisions
5 Feb 13	**Test 1: Chapters 1-4**
6 Feb 20	**Chapter 5:** Lists and Loops
7 Feb 27	**Chapter 6:** Procedures and Functions
8 Mar 6	**Chapter 7:** Multiple Forms, Modules, and Menus
(Spring Break :Sunday, Mar 12 – Sunday, Mar 19)	
9 Mar 20	Chapter 8: Arrays and More
10 Mar 27	**Test 2: Chapters 5-8**
11 Apr 3	**Chapter 10:** Working with Databases ***(Note: Chapter 9 will be covered later)***
The end of the twelfth week (Friday) is the deadline for withdrawing or changing to audit. If students feel that they cannot successfully complete the course and wish to withdraw/change to audit, it is their responsibility to do so.	
12 Apr 10	**Chapter 11:** Developing Web Applications
13 Apr 17	**Chapter 12:** Classes, Collections, and Inheritance
14 Apr 24	**Chapter 9:** Files, Printing, and Structures
15 May 1	Work on Assignment and catch up with class material if needed

16 May 8	**Test 3: Chapters 9-12**