

CIS 242 Database Programming – VBA

Welcome

Welcome to Database Programming – VBA.

Course Information

Prerequisite: Introductory programming experience in VBA as presented in CIS 240 is essential. Students should be well versed in conditionals, loops, functions, procedures and arrays.

Credits: 5

Description: Given project specifications, students use Visual Basic for Applications to create custom interfaces that allow users to retrieve, insert, update and delete data.

Optional on-site instructional assistance (tutorials) will be available for this class at the Whidbey Island campus. This is not obligatory for either the student or the instructor. Students are encouraged to form online study groups that *may* be the basis for optional tutorials, dependent upon schedules, room availability and levels of participation. Either the instructor or a group of students (at least 3) may initiate a tutorial.

Instructor Information

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Materials

Text: Title: Mastering VBA for Office 2013
Author: Richard Mansfield
Publisher: Wiley
ISBN: 978-1-118-69512-8

This text will be used as a reference book but MS Access is not covered extensively. Only because it is used in both CIS 240 and CIS 243, is it listed as the required text for this class. If you enjoy Access programming, I would encourage you to acquire an Access reference book that appeals to you. The detailed tutorials replace an imposed burdensome cost of another text that might have little use after this class. But more importantly, you will be required to improve your skills in finding support material and solutions on the internet.

Hardware: Flash (thumb) drive or comparable storage device

Software: Microsoft Office (Version 2016* or 2013 or 2010*)

***The text is written for 2013 so anticipate differences but they should be minor.**

Skagit Valley College provides licensing of Microsoft Office Software to all students. Information for this program is found at http://www.mysvc.skagit.edu/images/MySVC_Office_Guide.pdf. Realize that anytime you are installing or upgrading software, there is a chance that it may corrupt the current operating system, and may require the operating system and/or other programs to be reinstalled. This could result in a loss of data. *Students must assume all responsibility for possible losses.* Assistance in completion of labs on personal machines will be limited since the instructor will not have access.

Course Content

- Wizards in Application Development.
- Application Customization.
- Record Filtering.
- Module Creation.
- Recordset Object Creation.
- Data Maintenance: Select, Insert, Update, Delete.
- Application Debugging.

Course Objectives

After completing this course, the successful student will be able to:

- Use Wizards in Application Development.
- Customize Applications.
- Filter Records.
- Create Modules.
- Create Recordset Objects.
- Select, Insert, Update, Delete Records.
- Debug Applications.

General Education Outcomes

After completing this course, the successful student will be able to:

- Identify and express concepts, terms, and facts related to a specific discipline.
- Analyze issues and develop questions within a discipline.
- Identify, interpret, and evaluate pertinent data and previous experience to reach conclusions.
- Apply successful organizational strategies of planning, goal setting, prioritizing, resolving conflict, and managing time to specific goals and/or projects.
- Interpret information and reasoning expressed mathematically (for example in spreadsheets, diagrams, charts, formulas, etc.).
- Communicate mathematical information effectively.
- Demonstrate an understanding of fundamental scientific concepts.
- Use technology appropriate to the context and task to effectively retrieve and manage information, solve problems, and facilitate communication.

Communication: Email and Canvas

Because electronic mail and Canvas are vital tools of communication, students must form the habit of checking both frequently.

Email

As an SVC student, you have a college email account. **You must use this email address for all college business.**

Students can expect email responses from the instructor during regular weekday work hours (Monday to Friday, 9 am to 5 pm).

Given the increasing volume of email, the message deserves particular attention:

- make the subject line pertinent
- be clear and concise
- include original threads where pertinent
- attach a file when necessary

Pay attention to the content of the message:

poor content:

“I read Chapter 2 of the text and am having trouble understanding it – can you help?”

good content:

“On page 65, there is an example regarding ... I do not understand, can you give me another?”

E-Communication Policy

The CIS Department has been selected to pilot the proposed college e-communication (electronic communication) policy which applies to any e-communication among Skagit Valley College students and employees.

Clear and effective written communication is crucial to the success of any enterprise; this is acutely so in a learning environment where there is increasing reliance on e-communication.

In addition to the rules of email etiquette to be found at: <https://www.skagit.edu/academics/e-learning/netiquette/>, all e-communication must be **professional** in **vocabulary** and **tone**. Skagit Valley College provides a workplace (which includes e-communication) free from discrimination and harassment of any form. Confirmed violations of this policy will lead to corrective discipline.

If an infraction occurs, the offender may receive a reminder of this policy or a copy of the communication may be forwarded to: ecomm-abuse@skagit.edu.

Best Practice

Form the habit of asking yourself:

1. Could my communication possibly be interpreted as insulting, disrespectful, sarcastic, discriminating, mocking or rude?
2. How would I feel if the communication were directed to me?

Canvas

Not all features of Canvas will be utilized in this class. Students should have a clear understanding of the pertinent sections and take full advantage of the many benefits.

The only mandatory forum is Introductions (in the Orientation Unit). Other forums are made available for **students to interact with one another**. This simulates an ‘in place’ work group experience. Just as in a work group, I will be happy to contribute but I will enter a forum **only** if I am specifically invited, via email, to do so. You will find forums for each unit. Students are responsible for downloading course documents and taking part in discussions with classmates.

Assignment Submission Policy

Barring extraordinary circumstances, late assignments will not be accepted. Communicate the circumstance in general terms (e.g. personal serious health problem, sudden family emergency etc.) – no details please.

Unless otherwise directed, assignments will be submitted as follows.

Individual files making up an assignment are named according to the following convention:

Five parts:

1. 3 digit course number
2. 3 initials of student's name
3. 2 digit assignment number
4. a decimal
5. 3 letter application extension

Example for assignment 2 in CIS101 submitted by John Anthony Doe using Microsoft Word:

101JAD02.DOCX

Before submission, all files (even if there is just one) making up the assignment must be zipped into a file named according to the following convention:

Four parts:

1. 3 digit course number
2. 3 initials of student's name
3. 2 digit assignment number
4. .zip

Example for assignment 3 in CIS101 submitted by John Anthony Doe:

101JAD03.zip

Email protocol:

The subject line of the message:

Five parts:

1. 3 digit course number
2. 3 initials of student's name
3. 2 digit assignment number
4. space
5. Please Grade

Example of the email subject line for assignment 2 in CIS101 submitted by John Anthony Doe:

101JAD02 Please Grade

Include your name in the body of the email message.

Do not include messages in assignment submissions; send a separate email.

Points will be deducted if an assignment is submitted incorrectly.

Assignments

All assignment quizzes and/or tests where applicable are completed online through Canvas where a schedule of unit due dates is displayed. It is **strongly** recommended that you use a computer with a broadband internet connection rather than dial-up!

If you are a student with **documented** disabilities you must ensure that the instructor has been provided the appropriate documentation after which you may exceed the times allotted.

You are strongly encouraged to work through the labs in the text **but you do not submit those. The instructions for all assignments are found in Canvas.**

You may challenge any online test or quiz. Simply submit an email and include the quiz number, question number(s) and your reason for the challenge. At the end of the course, these will be considered on their merit for your final grade.

The last unit of the class must be completed by **11:45 pm on Wednesday of the last week of the quarter.** Given the time restraints for submitting grades, **there are absolutely no exceptions.**

Class Overview – Print this page and review frequently.

Within each unit you will complete assignments and online assessments as required and according to the schedule displayed in Canvas. Units and individual assignments will become available in sequence as you progress through the class. This is an overview of the class content:

Orientation Unit

1. Watch Canvas video.
2. Download and study the Syllabus.
3. Read the Honor Code.
4. Take the Syllabus Quiz.
5. Introduce yourself.

Unit 1

1. Read about: Option Compare Database; Option Explicit DoCmd Object
2. Complete Tutorial A.
3. Complete Lab 1.
4. Take Lab Quiz 1.
5. Take Test 1

Unit 2

1. Read about Access form and textbox events
2. Complete Tutorial B.
3. Complete Lab 2.
4. Take Lab Quiz 2.
5. Take Test 2

Unit 3

1. Complete Tutorial C.
2. Read about modules and adjusting form properties in design or programmatically (for example: [http://msdn.microsoft.com/en-us/library/aa191530\(v=office.11\).aspx](http://msdn.microsoft.com/en-us/library/aa191530(v=office.11).aspx))

3. Complete Lab 3.
4. Take Lab Quiz 3.
5. Take Test 3.

Unit 4

1. Read about database connections, record sets and handling runtime errors.
2. Complete Tutorial D.
3. Complete Lab 4.
4. Take Lab Quiz 4.
5. Take Test 4

Unit 5

1. Read about list boxes and record sets.
2. Complete Tutorial E.
3. Complete Lab 5.
4. Take Lab Quiz 5.
5. Take Test 5

Unit 6

1. Read about programming the office ribbon.
2. Complete Tutorial F.
3. Complete Lab 6.
4. Take Lab Quiz 6.
5. Take Test 6

Unit 7

1. Complete Final Exam.

Evaluation

Your grade will be based on:

6 Tutorials 15%

6 Labs (each of which includes a Lab Quiz) 55%

6 Tests 20%

1 Final Exam 10%

In Canvas you will download a grade tracking spreadsheet that will enable you to know your current grade at all times and enter hypothetical scores based on anticipated performance. The grade total in Canvas is **not** reliable.

Grading Scale

90	-	100	=	A
80	-	89	=	B
70	-	79	=	C
60	-	69	=	D
0	-	59	=	F

Pass/Fail grading is not an option.

Class Components

The primary features of this class are:

Readings & Videos

Though not explicitly indicated in the Class Overview, readings are a crucial component of this course. The course material is not aligned directly to the text which is intended as a reference only and may be supplemented with other texts where available and online resources. For instance, tutorial B covers message boxes - you are expected to reinforce those explanations with material found in your text. But understand that there may be some aspects of message boxes explained in the tutorial that are not in your text which should drive you to other resources (texts, internet) for additional support. **It is extremely important that you form the habit and improve your ability to seek out a wide variety of support materials.** Where applicable you will be required to view videos that will supplement course topics.

Tutorials

This class has 6 tutorials.

Your email submission will have the appropriate attached tutorial (zipped file(s)). e.g. The solution to Tutorial A will be named 242XXX_TutA.accdb - zipped into a file named 242XXX_TutA.zip.

The tutorials will serve as a preparation for the labs. Each tutorial **must** be successfully completed before moving forward to the respective lab. There will be topics covered in tutorials that are perhaps not in the reference text - **you are responsible for those topics.** Tests also reflect the content of the tutorials.

If you do not complete the tutorial successfully, you will not complete the lab successfully. **Do not submit the tutorial until it is completely correct else you will receive a score of zero.** The grade book value for each tutorial is 10. **Your score will be either 10 or 0.**

Work through the tutorial creating/checking your solution as you go. Get assistance on tutorial topics you do not understand before attempting the lab.

Labs

Labs require lots of pondering and re-working so be sure to allow enough time.

Your email submission will have the appropriate attached zipped file (containing database(s)).

e.g. The solution to Lab 01 will be named as indicated in the lab assignment and zipped into a file named 242XXX01.zip (where XXX are your initials).

Lab Quizzes

Lab quizzes are taken after you have submitted your zipped file for the respective lab. You may take each Lab Quiz **just once.** The number of questions for each lab quiz and the duration for each may vary. In each Lab Quiz you will answer T/F questions pertaining to the respective lab. Unless you hear otherwise, your score for the lab quiz will be your score for the lab. **You must answer the lab quiz according to what your lab submission indicates. Failure to do so may result in a score of zero for the assignment.**

Therefore, have your lab solutions available before you begin.

Tests

There are 6 tests. Number of questions and duration may vary but each test may be taken just **once.** Test content is based on material covered in tutorials and text readings. Upon completion, you will see your score.

Final Exam

The final exam is a lab and lab quiz similar to labs and lab quizzes throughout the quarter.

Academic Conduct

Academic Honor Code

All students of Skagit Valley College are responsible for knowing and adhering to the Academic Honor Code of this institution found at <http://www.mysvc.skagit.edu/honorcode>. Violations of this code include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct are reported to the student conduct officer. Students found to be in violation of the Academic Honor Code are subject to academic consequences up to and including failure of the course. Students may also be subject to college disciplinary sanctions up to and including expulsion from the College.”

Code of Student Conduct

<http://www.mysvc.skagit.edu/conduct>

Student Complaint Policy

<http://www.mysvc.skagit.edu/complaint>

College Policy

The Board of Trustees of Skagit Valley College provides a workplace free from discrimination and harassment of any form. This applies to students and employees of the college anywhere on campus. Confirmed violations of this policy will lead to corrective discipline.