# CIS 215 - Advanced Business Computing

## Cedar Crest College

Spring 2009 Tony Marasco

#### COURSE CONTENT

In this course, the application of advanced features of spreadsheet software and database management software to solve business problems through computer modeling and other techniques will be explored. Emphasis is placed on large application development and user-interface design. Computer techniques using other business software and the role of the computer in shaping business are also considered.

The course is instructor-led in a computer laboratory. Students may follow the lecture in a hands-on style; however, the instruction will not pause nor will the instructor provide one-on-one assistance during class time. Laboratory time is scheduled; however, as this class may require extensive research and commitment outside of class. As assignments increase in difficulty increased commitment is required by the student.

#### CREDIT VALUE

Three (3) credits

#### **PREREQUISITE**

CIS101

This course will <u>not</u> teach the fundamentals of Microsoft Office 2007, GroupWise, and Windows XP. This includes, but is not limited to: sending and receiving attachments, creating and extracting files from ZIP (compressed folders) archives, and moving files. This course has a heavy focus on electronic communication and is designed to be paperless. The student is expected to be able to exhibit and apply base problem solving skills. The instructor should not be relied upon for tutoring of fundamentals of programming or problem solving skills as judicious use of office time is focused on the goals of this course.

Certain aspects of Excel and Access will be *reviewed* in this course. These topics were assessed in CIS101. It is the student's responsibility to reorient themselves with these topics. Specifically, the topics for review are included in the first four projects in Excel and the first two in Access. If these two classes, as shown on the syllabus, are not ample time to cover the review, we will not review the remainder material in class—Project III will be the topic discussed in the next class.

As discussed in the footnote, it is the student's responsibility to gain access to the software tools used in this class—either purchasing a license or using the Cedar Crest labs.

### TEXTS AND MATERIALS (Title/Edition, Author, ISBN, Publisher)

Microsoft Office Excel 2007: Comprehensive Concepts and Techniques - Shelly, Cashman, Quasney

ISBN: 1-4188-4344-X, Course Technology

Microsoft Office Access 2007: Comprehensive Concepts and Techniques - Shelly, Cashman, Quasney

ISBN: 1-4188-4341-5, Course Technology

Microsoft Office 2007<sup>1</sup> Professional Edition (software supplied by Cedar Crest in the labs *or* you may purchase a copy. The student edition does not contain Microsoft Access that is required.) looseleaf notebook

at least two (2) High Density  $3\frac{1}{2}$  Diskettes (one for backup), CD-RW, ZIP disk, or USB drive. Data disks for assignments are supplied on the T: at Cedar Crest.

Cedar Crest email and network account.

Note: Microsoft Office 2007 uses a file format different from previous versions of Office. For this course you must use Microsoft Office 2007 Professional Edition to complete and submit all work.

#### COURSE EXPECTATIONS AND OUTCOMES

The objective of this course is to provide students with the techniques required to process and analyze data using Excel 2007 and Access 2007.

After completing this course you should be able to:

- Differentiate the concepts of data and information.
- Develop comprehensive financial reports using Excel 2007.
- Use advanced filtering, sorting, and finding techniques.
- Linking data from external sources using Microsoft Query.
- Developing and using pivot tables.
- Creating tables, queries, reports, and macros in Access 2007.
- Apply the techniques learned in class.

### COURSE OBJECTIVE, OUTCOME, AND ASSESSMENT

Objective: Upon completion of this course, the student will understand the concepts of advanced Excel

spreadsheet creation and basic database design. The student will gain proficiency with an industry standard application (Microsoft Office 2007 Professional) for use in this course.

Outcome: Students will demonstrate critical thinking, qualitative application methods, and

quantitative reasoning skills in the design of spreadsheets and databases—both in the

logical and physical aspects.

Assessment: Students will complete scenario-based assignments based on real-world situations.

Assignments are assessed on "correctness" based on interpretation of business rules coupled with techniques discussed. In class and self assignments will be used for assessment. Examinations will be used as an assessment tool as well. Application of the techniques is required. Since it is not possible for every scenario to be presented in class or through examples, examinations will measure the optimal use of tools presented in class and in the text through examples not necessarily explicitly shown in class. This technique is similar to

mathematics "word" problems where the concepts presented are examined.

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<sup>&</sup>lt;sup>1</sup> For this course, functions available only in Microsoft Office 2007 Professional Edition will be included in classroom and assignments. Therefore no assignment created in any Office version other than Microsoft Office 2007 Professional Edition will be accepted. If you do not own a license of Microsoft Office 2007 at home, you must purchase one or use the software available at Cedar Crest.

#### COMPUTER HARDWARE AND SOFTWARE

The course requires extensive work on IBM compatible computers similar to Cedar Crest College's micro labs located in the basement of the AD building and in Curtis. Labs are available whenever the building is open (and class is not in session in the room) and any computer in any lab or dorm lab may be used providing the necessary software is installed. Assignments must be completed in the specific software package and version discussed in class. Cedar Crest College does not provide software for use on personally owned computers. If the student wishes to purchase the software packages it is the student's responsibility to properly install such software. The instructor, peers, or Cedar Crest representatives are not responsible for supporting individual students' computers. Sharing diskettes for class assignments, sharing network accounts, and copying software are violations of the honor code. Sharing commercial programs is a violation of U.S. copyright laws.

All software used in the course will be available only on the local-area network. All students need to apply for an account to use the LAN and Internet. If you own the software required for the assignment (and the proper version/revision number) you may use it for class assignments. In the event you own a different version or a competitive product, you must obtain permission from the instructor *prior* to beginning your project. For example, Microsoft Excel is the spreadsheet on which Cedar Crest assignments are based. Using Microsoft Works is *not* acceptable. **Using Microsoft Works is** *not* acceptable as its file formats are not compatible with Microsoft Office. Submitting assignments that cannot be opened by the instructor results in a grade of zero for that assignment. Under no circumstances are you permitted to copy software from the Cedar Crest Labs for use at home.

Note: Saving work on the public hard disks (C:, desktop, "My Documents", etc.) is not advisable because there is no security on the local machines and your work may be deleted at any time. Work lost on the network disk may be recovered, in some instances, and Computing Services should be contacted immediately to schedule potential recovery. You should always backup (keep two copies) your work.

#### CCC HONOR CODE

Please be reminded of Cedar Crest College's Honor Philosophy during this course. The Honor Code applies to and is not limited to class assignments and examinations.

I fully support the Cedar Crest College Honor Code and the Classroom Protocol code as stated in the Customs Book.

#### CCC POLICY FOR LEARNING DISABILITIES

Students with documented disabilities who may need academic accommodations should discuss these needs with their professors during the first two weeks of class. Students with disabilities who wish to request accommodations should contact the Advising Center.

#### CCC LAB ASSISTANTS AND TUTORS

A lab assistant is assigned to do hardware and software maintenance at each dorm lab, and her name and room number are posted in the dorm. Additionally, there is a lab assistant on duty to provide more extensive help at the central site most days, evenings and weekends. They are trained to handle questions but are instructed not to provide help which would violate the honor code. THE LAB ASSISTANTS ARE NOT RESPONSIBLE FOR ANY OF YOUR COMPUTER WORK; YOU SHOULD NOT EXPECT THEM TO TUTOR YOU OR MAKE UP FOR MISSED CLASS TIME OR POOR NOTES. Specifics will be discussed in class. Hours and pictures are posted in Lab 1.

The Cedar Crest computer labs are at all times a work area and not an entertainment area. It is absolutely essential that all students find a comfortable, quiet atmosphere conductive to work. Violations in the form of loud, disruptive behavior of any kind will not be tolerated and will be handled according to established policy.

Tutors are available for most course offerings at Cedar Crest. *Tutors should be not relied upon to complete assignments*. Tutors should offer assistance when the student cannot resolve a particular difficulty. Students should attempt to the best of their ability to work through difficulties encountered. In this way the students' problem solving skills will be sharpened for post-academic employment.

#### **ASSIGNMENTS**

All assignments in this class are created on the computer using a tool – Excel or Access. Such assignments must be submitted with <u>electronic media</u>. That is, either diskette, CD-R/W, ZIP-100/250, USB Disk, or via the Cedar Crest Email system.

#### Printouts alone are not acceptable.

If assignments require printouts <u>do not</u> submit the assignment without including the electronic (Excel or Access file) version! You must <u>prepare</u> the assignment for printing (such as setting "rows to repeat" in Excel) but you do not need to print. If the assignment requires multiple printouts to illustrate your progress, you may save multiple versions of your work and submit all of them electronically.

Additionally, all assignments must adhere to the following specifications:

- Proprietary material **may not** be submitted as part of any course assignment. This is considered plagiarism and could result in severe penalties to the student.
- All course work may be submitted only once.
- All course work, unless designated as a group project, must be completed solely by the student. Sharing of work
  is considered breach of the Honor Philosophy.
- Handwritten assignments will be accepted (where applicable); however, it is the student's responsibility to verify
  the writing is legible or point deductions may occur.
- The tone of writing within documents submitted must be scholarly in nature and language.
- Writing style when submitting research papers must adhere to MLA guidelines.
- Some assignments use a data disk for completion. All files required are copied onto the Cedar Crest file server (T:) for convenience. The data disks are structured by application (Excel or Access) and then by project. The project number is associated with the project from which the assignment is located. For example, an assignment from project 5 in Excel will be found in the folder: Excel\Project5.
- It is your responsibility to secure your work from unauthorized duplication and taking precautionary steps to avoid corruption of your work.

If an assignment is not completed and turned in on the due date, five percent of the total value of the assignment value will be deducted PER DAY AFTER THE DUE DATE THAT I DO NOT HAVE THE ASSIGNMENT – NO EXCEPTIONS. If an assignment is handed in late it should be submitted into the DROPBOX or emailed for prompt reception of credit. Late assignments will be graded when the instructor receives them—not based on a date written by the student. If a student wishes to receive credit based on the date submitted, the assignment must be accompanied with a date and signature of the department secretary. Late assignments will be returned after on-time assignments are graded so it is possible that your late assignment will not be returned in time for studying for examinations. Submit your work on the due dates.

All work returned and graded you are encouraged to keep for reference. Your instructor will attempt to return the graded work by the next class. Assignments represent a high percentage of your grade. The student who is not willing to give a commitment of time and energy to the computer will almost certainly fail. Projects for this class will require a <u>substantial</u> dedication of time.

All assignments are designed for the average student's ability. The instructor will provide assistance in the event a student has difficulties with assignments. The degree of assistance and when the assistance occurs is at the sole discretion of the instructor. It is not the responsibility of the instructor, tutors, or peers to supply specific formulae or source code. Students must plan their time judiciously. It is the student's responsibility if assistance cannot be granted before the due date of an assignment causing late penalties to be incurred because of poor time management.

All assignments must adhere to the standards set forth by user interface design. Most of these are explicitly described in class while others will be implied based on related topics. These standards are *cumulative* throughout the course and the student must implement these. Failure results in point deductions on these assignments.

There are no "assignment/exam reviews" in this class. That is, you may not pre-submit your work and request your instructor to comment on your progress, accuracy, or exactness of your work prior to grading. Assignments or examinations are submitted for grading one time. There are no retries.

#### CLASS ATTENDANCE

Attendance at all classes is highly recommended, as we are covering an extensive amount of material which may seem disjointed and overwhelming without the continuity of classroom discussions. Some classroom discussions will require a "hands-on" approach and some will discuss material not covered in the text. While handouts will be provided, you will be responsible for the materials in the text and discussed in class.

If a student cannot attend a class meeting, it is solely the student's responsibility to complete all assignments by the designated due date using electronic mail, inter-office mail, hand-delivery, etc. Likewise it is the student's responsibility to obtain any course notes and information discussed in class. If handouts were provided the instructor will maintain copies for the student during the absence. The instructor is not required to maintain or give details to a student of any material discussed in class. Likewise, students are not permitted to borrow or view the instructor's materials not designated for class use for any reason.

Almost all computer assignments will be discussed in some detail in class and some may be modified, so your constant attention is required. Statistics on students who have been unable to motivate themselves to attend this class are dismal, but very revealing.

#### **EXAMINATIONS**

Attendance is mandatory on the exam dates listed on the syllabus. Failure to notify the instructor IN ADVANCE and produce a documented excuse will result in a grade of 0 for that exam. NO EXCEPTIONS.

Examinations are designed to assess the student's knowledge in the subject matter. This includes the ability to apply and critically think through problems. Therefore examinations will include questions based on application of theories. Wrote memorization will not constitute 100% of any examination. Technology changes at an extremely rapid pace and the ability to apply knowledge is critical to future success and exceeding expectations in the workplace.

The class meeting before an exam will have some time allotted for review. The review clarifies any questions the students may have based on materials to be included on the exam. The student should take careful notes during the semester as the exams focus on materials discussed in the classroom.

Please note: The late penalty (5% per day) for assignments does not apply to examinations. A late examination is a zero.

Cedar Crest Final Exam Policy: Your obligations for this course include attendance at the final exam, on the day and time scheduled by the Registrar's Office. You should not make travel arrangements until the final exam schedule is published; if you must make plans early, you should schedule your travel after the last final exam day

#### OFFICE HOURS

I will be available in my office in Curtis 204 or in the lab during this time or location and times may be scheduled by appointment. Office hours are provided on a first-come first-served basis unless previously scheduled. Please note that office hours are not a substitute for tutoring and this time should not be regarded as personal tutoring time. In this way all students will have potentially equal access to the instructor of this course.

Students should be considerate and not interrupt an existing session the instructor is leading while awaiting their time slice. Likewise, students should not attempt to impose deadlines on tutors, the instructor, or peers if assistance is desired.

Monday: 6:00 pm-7:00 pm or by appointment

email: trmarasc@cedarcrest.edu

Phone: 610/437-4471 (ask for Rebecca)

Course Webpage: <a href="http://www.cedarcrestonline.net">http://www.cedarcrestonline.net</a>

### COURSE REQUIREMENTS AND GRADING

Points for this course are listed below as well as the number of points required for the respective letter grade. Points required are determines by the Department and not the instructor. Please note that in assignments and examinations points are distributed in a graduated form. Therefore, in an assignment with five parts with a total value of ten points, do not assume each part is worth two points. More difficult sections will have a higher point value.

One Exam (100 pts)	33.3%	A:	279	C+:	231
Final Exam (100 pts)	33.3%	A-:	270	C:	219
Projects (100 total)	33.3%	B+:	261	C-:	213
		B:	249	D+:	201
Total – 300 pts.	100%	B-:	240	D:	180

Are in Brackets    Course pre-requisites in italics3   Project I   AC2-49    Project I   AC2-49    Project I   AC7-136    Project II   AC7-136    Project III   AC138-204    AC132-133 In The Lab Lab 2 Steps 3-8 & 10-13   Each query must display the resulting fields in the order as described in each exercise. Do not include fields not specified in the exercise in your solution.   Submit the Access Database	SYLLABUS*		
Project I   AC24-9    Project II   AC74-136    Project II   AC74-136    Project II   AC74-136    Project II   AC138-204	Date		
Project III [AC138-204]   AC132-133 In The Lab	1/19	Project I [AC2-49]	
Lab 2 Steps 3-8 & 10-13   Each query must display the resulting fields in the order as described in each exercise. Do not include fields not specified in the exercise in your solution. Submit the Access Database	1/26		
2/9	2/2	Project III [AC138-204]	Lab 2 Steps 3-8 & 10-13  Each query must display the resulting fields in the order as described in each exercise. Do not include fields not specified in the exercise in your solution.
AC200-201 In The Lab	2/9	Project IV [AC233-296]	
AC 292-293 In the Lab   Lab 2 Steps 1-4   Submit the compacted Access Database			Lab 2 Steps 1-5, 8, 11-14
AC 292-293 In the Lab   Lab 2 Steps 1-4   Submit the compacted Access Database	2/23	Project V [AC298-360]	
Course pre-requisites in italics   Project I [EX2-80]   Project II [EX82-159]   Project II [EX82-159]   Project II [EX162-248]     3/23	3/2	Project VI [AC362-424]	Lab 2 Steps 1-4
Project I   EX2-80    Project II   EX162-248	3/9	SPRING BREAK – NO CLASS	
3/23 3/30 Project IV [EX266-336] Project V [EX338-415]  EX330-332 In The Lab Lab 2 Steps 1-7, 9-12, & 16 Submit the Microsoft Excel Workbook There are no files to download for this assignment.  4/6 Project V [EX338-415] Additional Excel Functions BREAK - NO CLASS 4/20 Project VII [EX530-623] EX408-411 In The Lab Lab 2 See eCollege for details for this assignment Submit the Excel Workbooks in a single ZIP named "Lab 5-2 Workbooks"  4/27 Project IX [EX706-800] Froject VI [EX417-526] EX615-617 In The Lab Lab 2 Part 1, Steps 1-11, 13-15 (DO NOT PRINT) Submit the Excel Workbook	3/16	Project I [EX2-80] Project II [EX82-159]	EXAM I DUE
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Lab 2 Part 1, Steps 1-11, 13-15 (DO NOT PRINT) Submit the Excel Workbook	4/27	Project IX [EX706-800]	
5/11 Final Exam EXAM II DIJE	•	J 1	Lab 2 Part 1, Steps 1-11, 13-15 (DO NOT PRINT) Submit the Excel Workbook
	5/11	Final Exam	EXAM II DUE

Please read the footnotes

Dates subject to change

<sup>&</sup>lt;sup>2</sup> Please note that some exercises require data disks. **All data are available for download on eCollege in the respective Project.**<sup>3</sup> Items in italics (course pre-requisites) will not be covered in class. Please review the text and submit questions to your instructor through eCollege or email.