**ESSEX COUNTY COLLEGE**

**Business Division**

**CIS 235 *–* Advanced Micro Computer Spreadsheets**

**Course Outline**

**Course Number & Name:**  CIS 235 Advanced Micro Computer Spreadsheets

**Credit Hours:**  3 .0 **Contact Hours:** 3.0 **Lecture:** 3.0 **Lab:**  N/A **Other:**  N/A

**Prerequisites**:  Grade of “C” or better in CIS 135

**Co-requisites:** None **Concurrent Courses:** None

**Course Outline Revision Date:**  Fall 2010

**Course Description**: This course is a continuation of CIS 135, which introduced students to the spreadsheet analysis application, Excel for Windows. Continuing the step-by- step instruction using case studies, advanced Excel features and OLE (Object Linking and Embedding), hyperlink to the Internet and Visual Basic function will be covered. Special attention is paid to creating macro modules using Visual Basic. An advanced research project is required.

**Course Goals:** Upon successful completion of this course, students should be able to do the following:

1. describe and demonstrate advanced MS Excel skills;
2. plan, build, and test MS Excel worksheets, which contain advanced-level Excel features;
3. create and consolidate data; and
4. describe and create Pivot Table and Pivot Charts.

**Measurable Course Performance Objectives (MPOs)**: Upon successful completion of this course, students should specifically be able to do the following:

1. Describe and demonstrate advanced MS Excel skills:
   1. *describe and demonstrate different advanced Excel features*;
   2. *manage and copy data to Word and PowerPoint*;and
   3. *prepare workbooks for distribution*
2. Plan, build, and test MS Excel worksheets, which contain advanced-level Excel features:
   1. *create a one- or two-variable data table;*
   2. *solve problems with Goal Seek;*
   3. *use Scenario Manager to manage data;* and
   4. *solve problems with Solver*

**Measurable Course Performance Objectives (MPOs)** (continued):

1. Create and consolidate data:

* 1. *consolidate data from multiple worksheets;*
  2. *create three-dimensional formulas;*
  3. *create a documentation worksheet;*
  4. *validate data;* and
  5. *set up a Watch Window*

1. Describe and create Pivot Table and Pivot Charts:
   1. *plan and design a table based on data table theory;*
   2. *import data from text files and other sources;*
   3. *apply advanced filtering and sorting methods to tables;*
   4. *create and use range names;*
   5. *use data functions;* and
   6. *create and delete Pivot Tables and Pivot Charts*

**Methods of Instruction**: Instruction will consist of lectures, web/computer assignments, and class discussions.

**Outcomes Assessment:** Connect assignment,quiz, test and exam questions are blueprinted to course objectives. A checklist rubric is used to evaluate the research project for the presence and student mastery of course objectives. Data is collected and analyzed to determine the level of student performance on these assessment instruments in regards to meeting course objectives. The results of this data analysis are used to guide necessary pedagogical and/or curricular revisions.

**Course Requirements:** All students are required to:

1. Maintain regular attendance.

2. Complete assigned work including the research project on time.

3. Take part in class discussions.

4. Take all quizzes, tests and exams as scheduled.

**Methods of Evaluation:** Final course grades will be computed as follows:

**% of**

**Grading Components final course grade**

* **Attendance/Participation 0 – 10%**

Attendance and class participation shows commitment to learning and interest in microcomputer applicationsin business.

* Connect Assignments (dates specified by the instructor)**10 – 30%**

Connect is a web-based assignment and assessment solution software package required to be used in this course. Connect ‘MY IT LAB’ is designed to assist students with their coursework based on their individual needs.

* **Quizzes, 2 or more Tests, Midterm Exam and a Research Project**  **25 – 50%**

(dates specified by the instructor)

Quizzes, Tests, and the Midterm Exam will show evidence of the extent to which students meet course objectives including, but not limited to, identifying and applying concepts, understanding terms and demonstrating evidence of a basic foundation of microcomputer applications in business organization. The midterm exam should indicate synthesis of course material learned in the first half of the course. The research project will provide further evidence of synthesis of course content and achievement of course objectives.

* **Final Exam**   **30 – 35%**

The comprehensive Final Exam will examine the extent to which students have understood and synthesized all course content and achieved all course objectives.

Note: The instructor will provide specific weights, which lie in the above-given ranges, for each of the grading components at the beginning of the semester. Also, students may use laptop computers in class.

**Academic Integrity:** Dishonesty disrupts the search for truth that is inherent in the learning process and so devalues the purpose and the mission of the College.  Academic dishonesty includes, but is not limited to, the following:

* plagiarism – the failure to acknowledge another writer’s words or ideas or to give proper credit to sources of information;
* cheating – knowingly obtaining or giving unauthorized information on any test/exam or any other academic assignment;
* interference – any interruption of the academic process that prevents others from the proper engagement in learning or teaching; and
* fraud – any act or instance of willful deceit or trickery.

Violations of academic integrity will be dealt with by imposing appropriate sanctions.  Sanctions for acts of academic dishonesty could include the resubmission of an assignment, failure of the test/exam, failure in the course, probation, suspension from the College, and even expulsion from the College.

**Student Code of Conduct:** All students are expected to conduct themselves as responsible and considerate adults who respect the rights of others. Disruptive behavior will not be tolerated. All students are also expected to attend and be on time all class meetings. No cell phones or similar electronic devices are permitted in class. Please refer to the Essex County College student handbook, *Lifeline*, for more specific information about the College’s Code of Conduct and attendance requirements.

**Course Content Outline:** based on the text **The Pearson Custom Program for CIS Advanced** **Micro Computer Spreadsheets** custom Essex County College edition with ‘MY IT LAB’ Access Code, by Robert T Grauer; published by Pearson; ISBN #: 0-558-08988-788-7

**Class Meeting**

**(80 minutes) Chapter/Topics**

1 Introduction to the online software and creation of student accounts

**Chapter** **1**

2 Track changes

3 – 4 Enable simultaneous changes by multiple users, save workbooks in different formats

5 – 6 Copy data to Word and PowerPoint, finalize documents, examine Excel options

7 **Test 1** on Chapter 1

**Chapter** **2**

8 – 9 Create a one- or two-variable data table, solve problems with Goal Seek

10 – 11 Use Scenario Manger, load the Solver add-in

12 – 14 Solve problems with Solver, review for the Midterm Exam

15 **Midterm Exam** on Chapters 1 & 2

**Chapter 3**

16 – 18 Consolidate data from multiple worksheets, define the three-dimensional formulas

19 – 20 Link workbooks, create a documentation worksheet, validate data, and audit formulas

21 Set up a Watch Window

22 **Test 2** on Chapter 3

**Chapter 4**

23 – 24   Design a table based on data table theory, import data from text files and other sources, apply advanced filtering and sorting methods

25 Create and use range names, use data functions

26 – 27 Create and delete Pivot Tables and Pivot Charts

28 **Research Project due**, Review for the Final Exam

29 Review for the Final Exam (continued)

30   Comprehensive **Final Exam** on all course material covered