Essex County College
Division of Mathematics, Engineering Technologies & Computer Sciences
CIS 135 – Micro Computer Spreadsheets
Fall 2022 Class Syllabus

Instructor: Daxay Patel

Office: T 216

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Office Hours: 10 am - 1 pm Tuesdays
4:45 pm - 5:15 pm Wednesdays
11:30 am - 1 pm Thursdays
<u>By appointment only:</u>
2:25 pm – 3:45 pm Mondays & Wednesdays

Course Section: OL1

Classroom:

Class Meeting Times:

Required Textbook: MyITLab with Pearson e-text (Access Card /physical textbook) -- for Exploring with Office 2019

Credit Hours: 3

Course Description: An introduction to Microsoft Excel, this course is specifically designed for students who have had experience with MS Word. This course will provide hands-on instruction in the use of one of the powerful spreadsheet analysis applications, Microsoft Excel. Basic spreadsheet design and creation, formulas, charts and data management are included. Step-by-step instruction using realistic case studies emphasizes the important features of the software. (Advanced features, case studies and macro creation using Visual Basic are included in CIS 235).

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

1. describe the spreadsheet software, Microsoft (MS) Excel;

2. plan, build, and test MS Excel worksheets;

3. create and edit a variety of charts and functions in MS Excel; and

4. solve problems, analyze large worksheets, build problem-solving tools, sort, and query internal databases in MS Excel.

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

1. Describe the spreadsheet software, Microsoft (MS) Excel:

   1.1 *compare and contrast the Microsoft Word and Excel software programs;*
   1.2 *discuss to what extent having Excel skills helps in the job search and in the workplace;* and
   1.3 *analyze the challenges of Excel use in a technological society*

2. Plan, build, and test MS Excel worksheets:

   2.1 *describe how data enters into a spreadsheet;*
   2.2 *explain various options of entering data into a spreadsheet;*
   2.3 *utilize different kinds of multimedia files and software found in Excel;* and
   2.4 *manage multiple worksheets*

3. Create and edit a variety of charts and functions in MS Excel:

   3.1 *choose, create, modify, and enhance charts with graphic spaces;*
   3.2 *change the source data;*
   3.3 *change the chart type;*
   3.4 *embed a chart in a MS Word document;*
   3.5 *embed data, modify a worksheet, update links, and view the chart as a webpage;*
   3.6 *discuss characteristics of charts and graphs;* and
   3.7 *describe data tables*

4. Solve problems, analyze large worksheets, build problem-solving tools, sort, and query internal databases in MS Excel:

   4.1 *freeze/unfreeze and hide/unhide rows and columns on a worksheet;*
   4.2 *protect a workbook and worksheet;*
   4.3 *control calculations on a worksheet;*
   4.4 *add, edit or delete large records on a worksheet;*
   4.5 *format, sort, and filter a table on a worksheet;*
   4.6 *create a summary report;* and
   4.7 *print a large workbook*

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. 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 on time.

3. Take part in class discussions.

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

Grading:

> Attendance & Participation.................10 %
>
> MYITLAB Simulation Exams............25%
>
> Grader Projects 10%
>
> Mid-Term Exam........................... 25%
>
> Final Exam................................ 30%

A student must earn a minimum grade of 70% on the final exam to obtain a final grade of C or higher for the course.

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 exploring series Microsoft Office 2019 with 'MY IT LAB'

Access Code by Grauer; published by Pearson Education, Inc.

Class Meeting (80 minutes)	Chapter/Topics
1-8	**Microsoft EXCEL 2019** **CHAPTER ONE Introduction to Excel** Introduction to Spreadsheets Mathematical Operations and Formulas Workbook/Sheet Management and Formatting Page Setup and Printing
9-14	**CHAPTER TWO Formulas and Functions** Formula Basics Function Basic Logical, Lookup, and Financial Functions
15	**REVIEW**
16	**MIDTERM EXAM**
17-22	**CHAPTER THREE CHARTS** Chart Basics Chart Elements Chart Design and Sparkline
23-28	**CHAPTER FOUR Datasets and Tables** Large Datasets Excel Tables Table Manipulation Table Aggregation and Conditional Formatting
29	FINAL EXAM REVIEW
30	Comprehensive **Final Exam** (all course material covered)

CIS		% of Grading Components
Attendance and Class Participation (class participation may include other Computer Projects assigned by the Instructor). Computer projects will show evidence of the extent to which students meet course objectives.		10%
MY IT LAB (web-based assignment and assessment solution suggested for this course).		25%
Grader Projects Computer projects or question/answers will show evidence of the extent to which students meet course objectives.		10%
Midterm Exam (dates specified by the instructor) Exams will show evidence of the extent to which students meet course objectives.		25%
Departmental Final Exam The **comprehensive** final exam will examine the extent to which students have understood and synthesized all course content and achieved all course objectives.		30%

Essex County College
Division of Mathematics, Engineering Technologies & Computer Sciences
CSC 100 – Fundamentals of Computer Science

Fall 2022 Class Syllabus

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> By appointment only:
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Course Section: 001
Classroom: T 211
Class Meeting Times: 8:30 am to 11:20 am Thursdays

Credit Hours: 3.0 Contact   **Hours**: 3.0   **Lecture**: 3.0   **Lab**: N/A   **Other**: N/A
Prerequisites: Grade of "C" or better in MTH 086 or placement
Co-requisites: MTH 092   **Concurrent Courses**: None

Course Description:
This course introduces the elementary concepts of computer science and is specifically designed for students planning to major in the discipline. The course emphasizes the various aspects of computing such as problem solving, algorithm design, and program construction. Students also explore the application of computer science to various real-world problems. An object-oriented programming language is used to develop the student's problem solving and programming skills.

Course Goals:
Upon successful completion of this course, students should be able to do the following:
> 1. demonstrate knowledge of basic hardware logic;
> 2. explain and interpret internal data representations;
> 3. implement algorithmic solutions in an object-oriented programming language;
> 4. use object-oriented design techniques to design algorithmic solutions for a variety of fundamental problems; and
> 5. discuss the applications of computer science in other disciplines such as business, engineering, medicine, etc.

Methods of Instruction:
Instruction will consist of lectures, laboratory assignments, and programming examples.

Course Requirements: All students are required to:
1. Complete all assigned reading.
2. Participate in class discussions.
3. Complete all assignments on time.
4. Take all quizzes, tests, and exams as scheduled.

Textbook:

Computer Science: An Overview, J. Glenn Brookshear, and Dennis Brylow, Pearson, 13 edition, (ISBN-10: 013487546-x ISBN-13: 978-013487546-0)

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

Grading Components final course grade	% of final course grade
Attendance and class participation: Attendance and class participation are necessary for students to benefit from the guidance of the instructor.	10%
Test (dates specified by the instructor): Test will show evidence of the extent to which students meet course objectives, including but not limited to identifying, explaining, and implementing course content, analyzing and solving problems, and stating appropriate conclusions using correct terminology.	15%
Midterm The same objectives apply as with tests, but it is anticipated that students will provide increased evidence of synthesizing a combination of concepts	25%
Project (dates specified by the instructor): Project will show evidence of the extent to which students meet course objectives, including but not limited to identifying, explaining, and implementing course content, analyzing and solving problems, and stating appropriate conclusions using correct terminology.	15%
Final Exam (comprehensive): The same objectives apply as with tests, but it is anticipated that students will provide increased evidence of synthesizing a combination of concepts.	35%

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- o   cheating – knowingly obtaining or giving unauthorized information on any test/exam or any other academic assignment;
- o   interference – any interruption of the academic process that prevents others from the proper engagement in learning or teaching; and

o   fraud – any act or instance of willful deceit or trickery.

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Course Content Outline: based on the text *Computer Science:* J. Glenn Brookshear, and Dennis Brylow, Pearson, 13 edition

Week	Topics
1	Introduction
2	Data Storage
3	Data Storage (cont.)
4	Data Manipulation
5	Data Manipulation (cont.)
6	Operating Systems
7	Operating Systems (cont.)
8	Operating Systems (cont.)
9	Networking and the Internet
10	Networking and the Internet (cont.)
11	Algorithms
12	Algorithms (cont.)
13	Algorithms (cont.)
14	Programming Languages
15	Review of all course material