

Elmira Business Institute
Student Syllabus: Spreadsheet Applications (MIS102)

Prerequisites: None **Course Credits:**

Course Delivery Mode: Residential

Credits/ Clock Hours: 2/45



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Course Description

This course is designed as a comprehensive overview of spreadsheet software. Students progress from an introductory level to advanced skill sets while preparing applications in business and office settings through a combination of lecture and hands-on use. Areas of focus will include understanding cells and data, formatting of values and labels, the use of formulas and functions, the creation and development of charts and tables, the application of macros and programming, and the use of data with other workbooks, files, and applications. At the conclusion of this course, students should have the confidence to apply these computer skills in the workplace. (Lec/Lab/Ext/Total) (15/30/0/45).

Student Learning Outcomes

Upon completion of this course, students will be able to:

- Demonstrate the use and functionality of electronic spreadsheets.
- Create and modify a new spreadsheet, or an existing spreadsheet.
Enter, format, and edit data in cells of a worksheet.
- Design, revise, and apply formulas and functions
- Create charts, graphics, and tables to represent data in other forms.
- Evaluate and link workbooks and address “information literacy” by using outside data sources
- Develop macros and have a basic understanding of programming.

Required Course Texts & Course Materials

Parson, June Jamrich, Dan Oja, Roy Ageloof, and Patrick Carey. Carol DesJardins *New Perspective: Microsoft Excel 2016*. Comprehensive with Mind Tap,. Boston: Cengage, 2017. Print. (ISBN: 9781337069410)

Access to Microsoft Excel 2016 software (available in all computer labs and the library)

Supplemental educational learning materials may include and are not limited to

To be supplied by the individual instructor.

Assessment

Assignments and projects will be evaluated on a standard grading rubric. Practical and written examinations will be graded according to content; (multiple choice, fill-in-the blank, short answer, and/or practicum).

The instructor will endeavor to return student work product by the next official class period whenever possible. Essay and/or research projects will be returned as soon as all class projects have been graded

Student Homework Policy Statement

Elmira Business Institute (EBI) syllabi contain assignments in alignment with the federal government's definition of appropriate, assigned homework for each credit hour. For each one-credit hour of classroom or direct faculty instruction, two hours of out-of-class student work will be assigned. (For example: A three-credit course will include an average of six (6) hours of homework each week.). For classes with laboratory or clinical work, a three-credit, four-hour class will include an average of six (6) hours of homework each week. For externships, each credit hour will include an average of three (3) hours of homework per week. Assignments are directly relevant to course objectives and learning outcomes and are included at the end of the syllabi. Each assignment will be graded and recorded by the instructor.

Calculation of a Semester Credit Hour

All coursework at Elmira Business Institute is measured in semester credit hours.

- One Semester Credit Hour is equivalent to fifteen (15) clock (contact) hours of lecture.
- One Semester Credit Hour is equivalent to thirty (30) clock (contact) hours of laboratory training.
- One Semester Credit Hour is equivalent to forty-five (45) clock (contact) hours of externship.

Definition of a Contact Hour

One contact hour is defined as 50 minutes within a 60-minute period of instructional activities (lecture, lab, clinical, and externship). The student is required to devote appropriate time to preparation and study outside the classroom.

Evaluation

<i>Assessment Type</i>	<i>% of Grade</i>
Tests/ Final Exam	30%
Homework	20%
Exercises	15%
Professionalism/Attendance	15%
Final Project	20%
Total	100%

Grading Scheme:

<u>Numerical Average</u>	<u>Letter Grade</u>	<u>Quality Points</u>
95-100	A	4.0
90-94	A-	3.7
86-89	B+	3.3
83-85	B	3.0
80-82	B-	2.7
76-79	C+	2.3
73-75	C	2.0
70-72	C-	1.7
68-69	D+	1.3

<u>Numerical Average</u>	<u>Letter Grade</u>	<u>Quality Points</u>
66-67	D	1.0
65	D-	0.7
60-64	F	0.0
Withdraw/Failing	W/F	0.0
Withdraw	W	----
Incomplete	I	----
Test Out	TO	----
Transfer of Credit	T	----

Course Policies

Behavioral Standards

Students are expected to abide by all public laws; to comply with the regulations and policies of the College; and to demonstrate a positive attitude, diligence, and courteous conduct toward instructors, staff, and fellow students. Respect for others in terms of language, demeanor, and attention to others while they are speaking is expected.

The College reserves the right to dismiss or suspend students for conduct which impedes, disrupts, or interferes with the orderly and continuous administration and operation of the College or any unit of the College. Attending EBI is not a right; it is a privilege.

As a part of its mission to prepare students for careers in the business and healthcare world, EBI requires students to dress in a manner that will create a positive self-image. Inappropriately dressed students may not be permitted to attend classes. Students in College externships are required to follow the participating organization's dress code.

No cell phone use or Internet access is allowed in the classroom unless permission is granted by the instructor and usage is course appropriate.

No eating or drinking in EBI's classroom laboratories (medical, business or technology) and Library.

Attendance Policy

Attendance is mandatory and will be used when calculating participation/attendance. Class will begin promptly. Students who are late or absent are responsible to obtain lecture notes, assignments, and announcements after class, so as not to interfere with class time, or the work of fellow students. One of the first questions a potential employer will ask the Career Services representative about is student attendance. Your attendance in the classroom directly represents your quality of potential work.

Students who do not attend classes after missing 14 consecutive calendar days or who fail to attend classes on a regular basis will be administratively dropped by the College. Since attendance is also used to verify enrollment for financial aid purposes, it is important that students attend classes on a regular basis to avoid loss of financial aid eligibility (student loans) and federal and state grants.

Make-Up Policy

When a student is absent, that student is responsible for making up missed class work. Make-up tests or quizzes may be offered at the instructor's discretion via ONE-STOP at the Library, and it is the student's responsibility to arrange a time at the librarian's convenience. One-Stop tests and quizzes must be taken within one week of the date of absence; failure to make up work, quizzes, or exams in a timely manner may result in a 0 grade. There is no charge for make-up work.

Mid-term or Final Examinations may only be made up with approval from the Campus Director/Dean and appropriate documentation.

Academic Integrity/Plagiarism Rules

Elmira Business Institute is committed to supporting its mission to provide an educational experience designed to develop professional competencies including developing habits of personal and professional integrity. The College expects all members of its community—students, faculty, and staff—to act honestly in all situations. Actions of Academic Dishonesty will not be tolerated. Academic Dishonesty “is any form of cheating and plagiarism which results in students giving or receiving unauthorized assistance in an academic assignment or receiving credit for work which is not their own.” All students are expected to agree to a pledge of honesty concerning their academic work, and faculty is expected to maintain the standards of that code. If you think it may be cheating, it probably is.

Please keep in mind that plagiarism includes:

- Copying another person's work and claiming credit for it
- Failing to give credit—both a works cited and in-text citations are required for information you retrieved from another source whether or not it is a direct quotation
- Incorrectly citing a source
- Failing to use quotation marks for a direct quote
- Improperly paraphrasing—both the words and the structure of your writing must differ from your source

Students will be given a complete policy the first day of class to review and sign.

For questions about plagiarism or assistance at any part of the writing process, please visit the Academic Achievement Center or Library.

Academic Support***Private Instruction***

Elmira Business Institute promotes student and faculty private instruction. This student service is provided at no charge for students enrolled in a program. Private Instruction is accomplished in the following way:

- Students should contact faculty members for scheduling private instruction.
- Mandatory private instruction scheduled by an Administrator when necessary.

Faculty Office Hours

The Faculty Office Hours are posted outside the classroom door. This the first stop for help for assignments, study skills, or writing for any course.

Academic Advising/Mentoring

Academic Advising/Mentoring is provided to each student throughout the semester. Staff or Faculty Mentors can facilitate student access to learning resources and answer basic questions regarding EBI academic programs and policies.

The Library

The Library supports the academic programs of the College and offers technology to assist student research in databases and on the Internet. A Librarian is available to assist in research and navigating our resources. Use the Library catalog (<http://ebi.scoolaid.net/bin/home>) to search for a book in the library, access databases and e-books, and find reference tools. Information is also available about community resources, including scholarships, part-time employment, child care, and transportation. Elmira Business Institute maintains a library of hundreds of volumes of reference materials and manuals for the students' use. This facility is used both for independent reading and for study. The Institution also provides its students with access to an e-library containing over 80,000 volumes and reference materials. The e-library is available to the students 24-7 by remote access. Available for students' use is a wide range of resource materials that include encyclopedias, unabridged dictionaries, almanacs, atlases, and many volumes directly related to subjects studied at Elmira Business Institute. Books for general reading are also included. The library is available to students during normal school hours.

STANDARDS OF SATISFACTORY ACADEMIC PROGRESS

The Satisfactory Academic Progress Policy ensures that all Elmira Business Institute students enrolled in a diploma and degree programs are maintaining satisfactory progress towards a successful completion of their academic programs. The criteria and standards contained in the policy are set to recognize academic achievements or to detect problems for which actions of early intervention and/or remediation can be taken. These standards apply to all students whether they are eligible for Title IV funding or not. The Satisfactory Academic Policy complies with the requirements of the federal and state regulatory guidelines and the accrediting

Satisfactory Progress Standards are designed to assess academic progress for classes taken at Elmira Business Institute only and requires a both quantitative measurements and qualitative measurements. Students must maintain satisfactory progress toward the completion of their program.


The following criteria are used to determine whether or not a student is making Satisfactory Academic Progress. These standards monitor whether a student meets the minimum quantitative and qualitative components. A student must be able to:

- Maintain a minimum cumulative grade point average (CGPA)
- Achieve the minimum incremental completion rate (ICR) and
- Complete the program within a maximum allowable time frame (MTF)

Failure to complete courses successfully for any reason will negatively affect Satisfactory Academic Progress. Failing courses or withdrawing from courses could result in extending the length of educational program, the loss of financial aid and/or dismissal. It is important to understand how these situations will impact SAP at your next evaluation points. In order for a student to graduate, the minimum requirements are a CGPA of 2.0 and completion of all required coursework without attempting more than 150% of the credits/hours in the program. The college determines that a student is maintaining satisfactory academic progress if the student meets or exceeds the quantitative and qualitative standards outlined below, based on the cumulative number of semester credit hours attempted.

A minimum of a “D-” is required to pass the course. Documentation will be housed in the student’s academic file. Although, this is the minimum passing grade. Students will need to meet the **Satisfactory Academic Progress** requirements.

Course Schedule

<i>Lesson #</i>	<i>Topic(s)</i>
<i>1</i>	Introduction Syllabus, Google Drive, GMetrix, MindTap Getting Started with Excel  <ul style="list-style-type: none"> • Open and close a workbook • Navigate through a workbook and worksheet • Select cells and ranges • Plan and create a workbook • Insert, rename, and move worksheets • Enter text, dates, and numbers • Undo and redo actions • Resize columns and rows
<i>2</i>	Creating a Customer Order Report <ul style="list-style-type: none"> • Enter formulas and the SUM and COUNT functions • Copy and paste formulas • Move or copy cells and ranges • Insert and delete rows, columns, and ranges • Create patterned text with Flash Fill • Add cell borders and change font size • Change worksheet views • Prepare a workbook for printing • Save a workbook with a new filename

3	Formatting Workbook Text and Data <ul style="list-style-type: none"> • Change fonts, font style, and font color • Add fill colors and a background image • Create formulas to calculate sales data • Format numbers as currency, percentages, dates, and times • Align, indent, and rotate cell contents • Merge a group of cells • Use the AVERAGE function • Apply cell styles • Copy and paste formats with the Format Painter • Find and replace text and formatting • Change workbook themes • Highlight cells with conditional formats • Format a worksheet for printing • Set the print area, insert page breaks, add print titles, create headers and footers, and set margins
4	Performing Calculations with Formulas and Functions <ul style="list-style-type: none"> • Document formulas and data values • Explore function syntax • Insert functions from the Formula Library • Perform a what-if analysis • AutoFill series and formulas • Use relative and absolute cell references • Use the Quick Analysis tool • Work with dates and Date functions • Find values with Lookup functions • Work with Logical functions
5	Analyzing and Charting Financial Data <ul style="list-style-type: none"> • Use the PMT function to calculate a loan payment • Create an embedded pie chart • Apply styles to a chart • Add data labels to a pie chart • Format a chart legend • Create a clustered column chart, a stacked column chart, a line chart, and a combination chart • Format chart elements • Modify the chart's data source • Create a histogram and Pareto chart • Add sparklines to a worksheet • Format cells with data bars

6	Preparing a Business Plan Capstone Project
7	Working with Excel Tables <ul style="list-style-type: none"> • Explore a structured range of data • Freeze rows and columns • Plan and create an Excel table • Rename and format an Excel table • Add, edit, and delete records in an Excel table • Sort data
8	Tracking Sales Data <ul style="list-style-type: none"> • Filter data using filter buttons • Filter an Excel table with a slicer • Insert a Total row to summarize an Excel table • Split a worksheet into two panes • Insert subtotals into a range of data • Use the Outline buttons to show or hide details
9	Pivot Tables and Pivot Charts <ul style="list-style-type: none"> • Create and modify a PivotTable • Apply PivotTable styles and formatting • Filter a PivotTable • Insert a slicer to filter a PivotTable and recommended PivotTable • Create a PivotChart
10	Managing Multiple Worksheets and Workbooks <ul style="list-style-type: none"> • Create a worksheet group • Format and edit multiple worksheets at once • Create cell references to other worksheets • Consolidate information from multiple worksheets using 3-D references • Create and print a worksheet group, link to data in another workbook, and a workbook reference • Learn how to edit links • Insert a hyperlink in a cell • Create a workbook based on an existing template • Create a custom workbook template
11	Developing an Excel Application <ul style="list-style-type: none"> • Create an application • Create, edit, and delete defined names for cells and ranges • Paste a list of defined names as documentation • Use defined names in formulas • Add defined names to existing formulas • Create validation rules for data entry • Protect the contents of worksheets and workbooks • Add, edit, and delete comments

12	Macros <ul style="list-style-type: none"> • Learn about macro viruses and Excel security features • Add the Developer tab to the ribbon • Create and run a macro • Edit a macro using the Visual Basic Editor • Assign a macro to a keyboard shortcut and a button • Save and open a workbook in macro-enabled format
13	Working with Advanced Functions <ul style="list-style-type: none"> • Use the IF function • Use the AND function • Use the OR function • Use structured references in formulas • Nest the IF function • Use the VLOOKUP, HLOOKUP, and IFERROR function • Use conditional formatting to highlight duplicate values • Summarize data using the COUNTIF, SUMIF, and AVERAGEIF functions
14	Final Examination Capstone Project
15	Certification Examination

Please note: Changes to the lessons may be made at the discretion of the instructor throughout the semester.

Revised February 2016 mzt , Revised July 2017 klp, August 2018 js, Revised August 2019 em, Revised December 2019 drg

Project for MIS102

You are working for a local winery. They want to be able to calculate a **cost per bottle** for the various wines they sell, so they can determine pricing with a 75% markup per bottle for the year. You have the following information to work with:

Grapes Expected
Red Wine Grapes

- 35 Tons
- 750 bottles per ton

White Wine Grapes

- 43 Tons
- 650 bottles per ton

Champagne Grapes

- 12 tons
- 575 bottles per ton

Bottles and Corks

- Champagne corks -10¢
- All other corks -3¢
- Brown bottles – white wines - \$.75 per bottle
- Clear bottles – red wines - \$.60 per bottle
- Champagne bottles - \$1.05 per bottle
- Labels - \$.15 each

Payroll

- Five vineyard workers, 40 hours per week, \$11.00/hour
- Three office workers, 40 hours per week, 12.00/hour
- Two showroom personnel, 20 per week each, \$10.00/hour
- One maintenance manager, \$18.00 per hour, 40 hours per week
- One general manager, \$60,000 per year
- One winemaker, \$28.00/hour, 35 hours per week

Building and Maintenance

- Budget electric bill, \$623.00 per month
- Budget fuel oil, \$350 per month
- Property taxes, \$20,000 annually
- Mortgage payment, \$2500 monthly
- Maintenance budget \$450 per week.
- Monthly office supplies, \$250/month
- Other office expenses, \$300/month
- Equipment maintenance, \$350 per month
- Workman's Comp, \$1500 per month
- Liability/fire insurance, \$1,000 per month



Using the above figures, what should this winery charge per bottle **for each type of wine**, if they want to make a 75% profit per bottle?

Using the **Scenario Manager**, create a scenario to determine how the cost per bottle will be affected if the number of tons of grapes goes up or down by 5 tons for each type of grape.

Bear in mind that how you lay out your spreadsheet and how you connect the formulas together will determine whether or not the Scenario Manager works.

Print out two versions of this project; one showing formulas, the other showing formula results. You may arrange your worksheets any way you want.

The project is due Week 13.

Career Readiness Assessment “CRA” ☐Midterm ☐Final

Student Name: _____ Course ID: _____ Instructor: _____

	Total Points	Excellent (16-20 points)	Good (11-15 points)	Fair (6-10 points)	Poor (0-5 points)
Attendance		The student arrives on time for the course, and stays for the duration of the class. Attends at least 90% of the class.	The student arrives on time for the course and stays for the duration of the course. Attends at least 85% of the class.	The student arrives late or does not stay for the duration of the class. Attends at least 75% of the class.	The student generally arrives late for the course, or stays for fewer than 65% of the class.
Class Engagement (Initiative)		Proactively contributes to class by regularly offering ideas and asking questions.	Proactively contributes to class periodically offering ideas and asking questions	Rarely contributes to class by offering ideas and asking questions.	Never contributes to class by offering ideas and asking questions.
Listening Skills		Actively listens when others speak during in-class activities. Incorporates the ideas of others in questions/comments.	Listens when others speak both in groups and lecture.	Does not listen in groups or lecture and is not engaged during class	Does not listen in groups and lecture. Interrupts or talks in class.
Behavior		Never displays disruptive behavior, respectful of others in actions and language, and cooperates in a classroom environment.	Rarely disruptive, partial participation in group activities	Occasionally disruptive, rarely participates in group activities.	Very disruptive with actions and language or never participates in group activities.
Professionalism		Always prepared for class, hands in work at beginning of class, and follows appropriate dress code. The student does not use electronic devices inappropriately.	Usually prepared for class, often hands in work at beginning of the class, and mostly follows appropriate dress code. The student rarely uses electronic devices inappropriately.	Rarely prepared for class, rarely hands in work at the beginning of the class, and rarely follows dress code. The student often uses electronic devices inappropriately.	Almost never prepared for class, excessively hands in work late, and does not follow dress code. The student excessively uses electronic devices inappropriately in the classroom.

Total Points: ____/100

Professionalism Grade
15%