

Course Title: IST106 Spreadsheet Software

Course Leader: Trudy Gift (retired Dec 2018) / Douglas Courter (instructor); reviewed by K Weil-Yates FT faculty/Lead instructor for CSS/NetAdmin

Expected Learning Outcomes for IST106 Spreadsheet Software

- Use Excel software in a variety of business and organizational settings to make calculations on financial and statistical data and present the results in a manner that is informative, documented, and useful to the reader.

Assessment

(How do students demonstrate achievement of these outcomes?)

The college is using Office 2016. This course evaluates the student's progress through the following: two critical thinking exams, 12 chapter simulations (for training purposes), 12 grader projects (in which the student must complete a set of instructions on a document) and 12 chapter exams comprised of a worksheet that the student must complete using the commands covered in each chapter (12 chapters). Each chapter's questions are based on specific skills that are mapped to the outcome for the course. This means that every activity is a valid assessment of the student's skills. They can either complete the activity or not. They have access to their textbook, Internet, and the exams are not timed. The exam is scored by course management software (MYITLAB by Pearson).

The 12 projects are required for each chapters. Students either create a new worksheet or they make modifications to a downloaded file(s). The concepts presented in the chapter are reviewed in the projects. They have access to their textbook, Internet, and the projects are not timed. Students have to use their critical thinking skills on how to solve the problem as requested. They also have three attempts to achieve the highest grade possible (only the highest grade counts). Student comments are the projects are much more difficult than the exam. This is intentional as it shows whether they can successfully apply what they have learned in the chapters to live examples. I am learning that most students do not read or complete the tutorial in the text. They rely only on the training provided by the publisher. This is resulting in poor project scores as compared to the exam scores. The outcomes of these project tie directly to the critical thinking exam.

This course continues to the use course management software that comes with the textbook. There are online trainings that students are required to work through. They may complete the trainings as many times as they want for the highest grade. As for the projects, they have three attempts to raise their grade. Only the highest grade counts. For exams, students only have one opportunity.

The format of the course lends itself readily to an online format. This past year the course was only taught online when the hybrid class did not get enough students to make a class. There were three students in the course. While there are students that are not equipped for an online course, two of the students did well working on their own. For those who might have needed extra help, there really was no help. The Learning Support Center does not have any that are able to help students. I would work with students one-on-one when necessary.

Validation

(What methods are used to validate your assessment?)

The course is taught using a Microsoft Certified Application Specialist approved courseware.

Microsoft Office Specialist Exam standards were reviewed for course content to be sure they mapped to the outcomes in this course.

In place of taking this course, the student may take the MOS Expert Excel certification exam. Upon receiving their certification and show the certification to the instructor, they can apply for 3 credits for this course.

Microsoft Office Specialist Exam Map

Objective
1.1. Insert data using AutoFill
1.2. Ensure data integrity
1.3. Modify cell contents and formats
1.4. Change Worksheet Views
1.5. Manage worksheets
2.1. Format worksheets
2.2. Insert and modify rows and columns
2.3. Format cells and cell content
2.4. Format data as a table
3.1. Reference data in formulas
3.2. Summarize data using a formula
3.3. Summarize data using subtotals
3.4. Conditionally summarize data using a formula
3.5. Look up data using a formula.
3.6. Use conditional logic in a formula
3.7. Format or modify text using formulas
3.8. Display and print formulas
4.1. Create and format charts
4.2. Modify charts
4.3. Apply conditional formatting
4.4. Insert and modify illustrations
4.5. Outline data
4.6. Sort and filter data
5.1. Manage changes to workbooks
5.2. Protect and share workbooks
5.3. Prepare workbooks for distribution
5.4. Save workbooks
5.5. Set print options for printing data, worksheets and workbooks

Results

	Chapters 1-4	Chapters 5-12
Student 1	0	0
Student 2	80	0
Student 3	0	0
Student 4	89	87
Student 5	78	84
Student 6	93	0
Student 7	82	0
Student 8	96	94
Student 9	91	87
Student 10	86	0
Student 11	83	0
All Students	70.76%	32.03%
Completed	86.49%	88.08%

(What does the data show?)

The spring semester critical thinking scores on the first exam were good for those students who completed it (86.49%). Of those, four students had almost a 90% or above. On the second critical thinking exam, only four students completed the exam and did very well (88.08%). These exams are directly correlated to the projects. The students are required to apply what they have learned to different scenarios for both the projects and critical thinking exam. The evidence shows students can follow directions (step-by-step is even better) but when confronted with working from nothing, they are very weak.

Follow-up

(How have you used the data to improve student learning?)

Starting in the fall 2016 semester, we moved to Windows 10 and Office 2016. That gave our students the most up-to-date and popular software for spreadsheets application.

I will continue to use the same textbook (updated version) with an improved format. [NOTE: we will be moving to Office 2019, in Fall 2019; this course is taught in the spring thus we will be moving to the new version of the text in Spring 2020] I will revamp the project and exam to be more similar in content. This will give the student more opportunities to improve their critical thinking skills.

Budget Justification

(What resources are necessary to improve student learning?)

Tutoring hours need to be increase.

There needs to be an Excel tutor part-time personal available in the Learning Success Center.