

**Course Title: IST106 Spreadsheet Software**

**Course Leader: Trudy Gift**

**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 critical thinking exam and chapter exams data are not included in this report (since it is available to the public). The critical thinking exam is used each semester is available on the Data folder located on the Y Drive/TCS/SLOA.

There 9 exams comprised of a worksheet that the student must complete using the commands covered in each chapter (9 chapters are covered). 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 (SAM by Cengage).

There are 9 projects required for each chapters. Students either create a new worksheet or they make modifications to downloaded files. 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. Student comments are that the projects are much more difficult than the exam. This is intentional as it shows whether they can successfully applied what they have learned in the chapters to live examples.

The presentation of this course has changed dramatically since Fall 2013. Previously, students had the opportunity to read a textbook, follow a step-by-step tutorial, completed projects, and completed a critical thinking exam which was problem oriented (similar to what they would encountered when taking the MOS (Microsoft Office Specialist) exam. The exam consists of a scenario and two questions based on that scenario. Students are asked to select their answer from 4 choices.

During the summer of 2014, a new course management software was selected. Students still had the opportunity to read/complete projects but training modules were incorporated. It was noticed that most of the students choose to complete the training rather than do the textbook option. In the Fall 2014, the software was fully implemented. Training has made understanding concepts in the textbook easier.

There are two groups of students. Those that grasp the online tutorials and can learn from there. Others require the face-to-face explanation (where they can also ask questions and receive immediate feedback).

**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, they can apply for 3 credits for this course.

**Microsoft Office Specialist Exam Map**

<b>Objective</b>
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**

(What does the data show?)

This course was cancelled Fall 2016.

**Follow-up**

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

Office 2013/365 is working great. Not having access to Windows 8 has not caused any major problems. We will continue to use Windows 7 on campus. An upgrade to Windows 10 will be required in Fall 2017.

Every other Wednesday from 5:30-7:00 the instructor offered an open lab time where students could come and get a preview to the chapter, cover difficult concepts, ask questions, receive help on projects, and discuss any computer problems. Even Wednesday there was an average of 3 students that took advantage of this additional study time. The grades did not show improvement because of this additional study time.

**Budget Justification**

(What resources are necessary to improve student learning?)

Tutoring hours need to be increase and there needs to be an Excel person part-time personal available in the Learning Success Center.