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. The actual data used to generate this report appear in the Data folder on the Y Drive/TCS/SLOA/.5 Haines/CSC Computer Science/2015.

The college did not change to Office 2016, therefore, we are still using 2013. This course continues with the same format as previous semesters: 9 exams comprised of a worksheet that the student must complete using the commands covered in each chapter (9 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 (SAM by Cengage).

There are 9 projects 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 applied 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 relive 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. 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 on line when the hybrid class did not get enough students to make a class. While there are students that are not equipped for an online course, most of the students did well working on their own. For those that needed extra help, there really was no help. The Learning Support Center does not have any that is able to help students. I would with students one-on-one when time permits but it is not an ideal situation, especially those students who want your continuous time. I also have

Course Outcomes Guide Spring 2016

videos that help but some student try 'social engineering' answers from the instructor. That does not work.

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

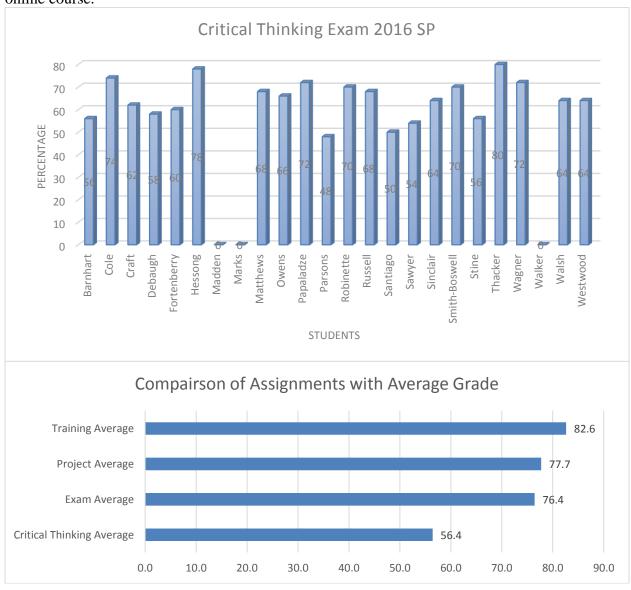
| ft Office Specialist Exam Map |
|--|
| Objective |
| 1.1. Insert data using AutoFill |
| 1.2. Ensure data integrity |
| 1.3. Modify cell contents and formats |
| 1.4. Change Worksheet Views |
| 1.5. Manage worksheets |
| 2.1. Format worksheets |
| 2.2. Insert and modify rows and columns |
| 2.3. Format 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

(What does the data show?)

The spring semester critical thinking scores were not good. This is a direct correlation 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.

The critical thinking average (without the three students who did not take the exam) was 56.4%. The highest score was an 80% compared with 98% the previous semester. The critical thinking exam, text, projects, chapter exams did not change. All indicators remained the same but the scores were much lower. There were approximately 5 students out of 24 that were not prepared for an online course.



Course Outcomes Guide Spring 2016

Follow-up

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

Starting in the fall 2016 semester, we will be moving to Windows 10 and Office 2016. That will give 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. 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 person part-time personal available in the Learning Success Center.