Course Title: IST 108
Course Leader: Karen Weil-Yates

Expected Learning Outcomes for Course

- *Implement a functional Windows workstation operating environment*
- *Practice good file management and disk organization both in local systems and on the cloud*
- *Perform basic diagnostics using tools and utilities to improve performance, increase security*
- *Protect data and facilitate user and system security through the use of available operating system tools*
- *Demonstrate a working knowledge of the Command line and the Registry*
- *Use critical thinking and demonstrate the ability to perform basic system troubleshooting skills*
- *Develop a sound, efficient system maintenance plan*

Assessment (How do students demonstrate achievement of these outcomes?)
Throughout the semester students submit solutions to Case Studies on various topics. Students take 2 exams. This semester common assessments have changed to better meet Expected Learning Outcomes. The other two common assessments are a 15-minute presentation on a Windows or Windows-related topic (to be approved by the instructor) and a system maintenance Exam. For the presentation, students must determine a scope (target audience) and complete Internet research on how others in this industry are using this utility or feature. They then must create a PowerPoint presentation with a minimum of 3 sources. Students record their Bibliography on the last screen of the slideshow. In addition, they must create a handout (other than the printout of their slides); this handout must be additional information that is not covered specifically in their presentation and can be in a variety of formats: flyer, brochure, FAQ sheet. For the System Maintenance Exam, student must locate a willing participant to interview and then develop a computer maintenance program and execute that program.

Validation (What methods are used to validate your assessment?)
The presentation is still a very valid assessment (using the same rationale from previous years—this project was co-designed with an adjunct with 25+ years business experience). A rubric was developed and has been modified each year to reflect subtle changes. It is posted on the Moodle site and is available for students to review from the first day of class. Class time is devoted to reviewing the project expectations, tips for presentations, examples of "good and bad" presentations.

A new textbook was adopted in January as the Fall semester's textbook was not up to college level standards; there was too much step-by-step "how-to tutorials" on very mediocre topics—no theory involved. The publisher was late in getting the book released; there was not much time to review. The second textbook is a reference manual; more suited to college level. I have created case studies for each chapter as there are no ancillary assignments associated with this book. Student assignments are submitted in various Word formats (tables, letters, step-by-step instructions, etc). I get validation through discussions with internship supervisors and advisory team members supporting the documentation skills and team work learned in this class.

Results (What does the data show?)
Average Presentation scores for the year are at 79.4% (after removing the F/Walk Aways, students who never dropped or stopped attending late in the semester). Spring Presentation Averages (88.9%) were much higher than Fall (69.9%). The spring classes had a good grasp of scope and had great handouts. Students are scored in the following 5 areas (they have access to the rubric from the first day of class): Introductions and Structure (design and formatting), Content, Delivery, Handouts, Bibliography. The most points lost are in the Structure, Handouts, and Bibliography areas. For the Spring semester classes, I emphasized and reviewed these areas several times.

The System Maintenance Plan Exam class average is 83%; this is a 20% increase from the last year. I find that most students cannot/do not follow directions rather than not understand the components and utilities of the operating system. Again Spring was much higher than fall: 89.5% vs 76.4%. I spent a lot more time developing the maintenance concept for this semester.

The Batch file assignment scores for the year are at 70.6%. The number of students completing has increased to 71% (24 of 34 students).

Follow-up (How have you used the data to improve student learning?)
The fall semester score were much lower—it became evident that the textbook was a big factor in lowering student's success. It was on-line and not college-level; many of the chapters were "fluff" (too many chapters devoted to multimedia and no theory on some of the more important topics, such as: file management, backup cycles, and CLI/batch files). I changed textbooks in for the Spring semester and results were much better.

The Maintenance exam is a good indication of critical thinking skills (what should be included and with what priority and precautions) and of customer service skills. One class was much stronger (average was >25% higher); this class had much higher reading compression skills than the other class.

The Batch file assignment submissions need to increase; this spring I have created a PowerPoint for reference, wrote a CLI review sheet (both were posted on Moodle). For the Fall 2017, I plan to add podcasts and will start earlier in the semester.

Budget Justification (What resources are necessary to improve student learning?)
External drives for backups; MSDNAA software (operating systems); Microsoft Office; removable hard drives