

Texas State University

Outcomes Report

General Information

Academic Year:	2014-2015
College:	Business
Department:	Accounting
Program:	Accounting and Information Technology (MS)
Program Code:	30.16
Outcome Type:	Student Learning (GR)
Degree:	Masters
Coordinator/Contact:	Dr. Ann L. Watkins, Chair
Status:	Data Entry Closed

Mission Statement

The mission of the Master of Science in Accounting Information Technology (MSAIT) program is to prepare students for successful careers in the accounting and information technology professions. Students may be eligible to sit for professional certification exams, such as CPA, CISM, CITP, CIA, AFE and others. The MSAIT program emphasizes oral and written communication, information technology, and technical and research skills needed for a careers in accounting and information technology.

Evidence of Improvement

In the academic year (AY) 2014-2015 MSAIT students were assessed on their ability to apply accounting information technology in new and unfamiliar situations, exhibit critical thinking skills, communicate complex issues clearly, and appreciate issues relating to ethical behavior. A comparison of 2015 results with those of prior-year results provide evidence of the following:

- **Outcome 1- Applying Accounting Technology in New and Unfamiliar Circumstances.** Students evidenced improvement on one outcome measure, a decline in performance on a second outcome measure and sustained 100% exceeding or meeting on a third outcome measure. Overall, students did not evidence discernible improvement on Outcome 1.
- **Outcome 2- Applying Analytical and Critical Thinking Skills to Evaluate Information.** Students demonstrated a slight decrease in performance on one outcome measure, but maintained performance or improved on two outcome measures. Overall, students showed slight improvement on Outcome 2.
- **Outcome 3- Demonstrate Ability to Use Information Technology (IT) and be Able to Apply IT in Analysis and Communication.** Students demonstrated improvement on all three outcome measures.
- **Outcome 4- Demonstrate Effective Oral Presentations that Explain Findings, Organize Ideas into a Coherent Train of Thought, and Justify a Conclusion or Recommendation.** Students demonstrated improvement on two of the three outcome measures and continued to meet or exceed expectations on one outcome measure. Overall students improved on outcome 4.
- **Outcome 5. Demonstrate Ability to Work Effectively in Teams.** 100% of students continue to meet or exceed expectations. We will consider increasing expectations on this measure.
- **Outcome 6. Demonstrate Ability to Recognize an Ethical Dilemma, Apply Ethical Reasoning to Resolve it and Provide Support for the Resolution and Effects on Stakeholders.** The results for this outcome have fluctuated from 21% (2011/12) to 88% (2013/14) to 69% (2014/15) of students meeting or exceeding expectations. There appears to be improvement on this measure, but it is not yet consistent.

Specific results for each outcome assessed are presented below.

Action Plan

In the MSAIT program was redesigned in the fall of 2014. The core content was changed in an effort to take emphasis off CPA exam preparation and focus on combining an understand of accounting information systems with developing higher order CIS skills. Faculty have reviewed the goals set for the program to ensure that there is alignment between changes to the program and learning goals. During the November 2014 meeting of the Accounting Advisory Board, the following recommendations were made with respect to learning goals:

- System Development and Implementation
- ERP
- Systems Development Life Cycle (SDLC)
- Database Design
- Project Management
- Process Engineering
- IT Audit
- Business analytics
- Written and oral communications

Many of the Boards expectations have been incorporated into the MSAIT Learning Goals for some time. Although not reflected explicitly in the MSAIT Learning Goals the following topics are offered in the MSAIT curriculum: System Development and Implementation, ERP, Systems Development Life Cycle (SDLC), Database Design, and IT Audit

Proposal: Consider, in consultation with CIS faculty, the incorporation of Process Engineering and Business analytics.

Specific action plans are presented below.

Outcome 1

Category: Student Learning Outcome

Students will demonstrate applying accounting and information technology knowledge in new and unfamiliar circumstances. Students will correctly analyze the problem, develop and explain findings, and justify a conclusion or recommendation.

Assessment of a student's ability to apply accounting and information technology knowledge in new and unfamiliar circumstances will be conducted using the following methods:

Outcome 1 - Method 1

In ACC 5371 (Accounting Information Systems) embedded questions will be used. It is expected that 80% of students will answer 85% or more questions correctly.

CIS 5355 (Database Management Systems) and CIS 5368 (Information Security) will use a rubric to evaluate a set of out-of-class individual assignments/projects. It is expected that 80% of students will meet or exceed expectations relating to a student's ability to apply accounting and information technology knowledge in new and unfamiliar circumstances as defined by the rubric. Exam-embedded questions will also be used. It is expected that 80% of the students will answer 85% or more questions correctly.

Outcome 1 - Method 1 - Result

Results:

ACC 5371. In the fall of 2014 **69%** of students met or exceeded expectations. In the spring this dropped to **39%** meeting or exceeding expectations. Supplemental (**but optional**) hands-on projects were provided on Tracs and/or in class. Unfortunately, it does not appear that many students took advantage of these additional resources. Further, the instructor was ill during a number of the classes when these materials were discussed, and may not have been able to express the content as effectively as she would have liked.

CIS 5355. In the academic year (AY) 2014-2015, 12 MSAIT students were assessed on their ability to develop a conceptual design and implement a relational database schema from a set of business information requirements via out-of-class assignments. The course instructor found that **100% (12) of the students scored 85% or higher** based on the rubric used to evaluate the conceptual design and implementation of the relational database. This analysis indicated that the overall performance of students was best for the conceptual modeling component followed by the implementation of a relational database schema component. Students' performance for this learning outcome can be improved by enhancing their performance for the implementation of a relational database schema component.

Action Plan:

ACC 5371. Performance was particularly poor on the flowchart question. Course coverage of flowcharting and diagramming will be expanded in the future.

ACC 5355. Based on the overall results, it seems that more emphasis on the relational database implementation component can improve the overall result. To enhance student learning, the course instructor plans to devote more class time to discuss the implementation of a relational database schema component.

Outcome 1 - Method 2

In ACC 5375 (Business Consulting), projects will be used to assess students' ability to apply accounting and IT knowledge. The projects will be assessed using a rubric. It is expected that 80% of students will meet or exceed expectations as defined by the rubric.

Outcome 1 - Method 2 - Result

Results:

For the three semesters prior to the fall 2014 semester, a project formerly conducted by KPMG was used. In the fall semester the course utilized a live project that is in process at McCoy Building Supply. The project worked well because of the active participation of McCoy's management team. **100%** of students met or exceeded expectations. The same project was used in the spring semester with similar results. This course is taken in the final semester, so this may explain the high percentage of students meeting with this outcome measure.

Action Plan:

The McCoy's project worked very well in the 2015 academic year. For fall 2015 the plan is to use a new project. The new client is Thermon. Thermon is a publicly traded company. The project will include the selection of an ERP system based on Thermon's needs.

Outcome 2

Category: Student Learning Outcome

Students will apply analytical and critical thinking skills to evaluate information, solve problems, and make sound decisions in accounting and information technology problems. Students will synthesize and evaluate the relevance of data and demonstrate analytical and critical thinking skills in exploring new questions, analyzing complex issues from multiple perspectives and arrive at reasoned conclusions.

Analytical and critical thinking skills will be assessed using the following methods:

Outcome 2 - Method 1

In ACC 5371 (Accounting Information Systems), embedded questions will be used. It is expected that 80% of the students will answer 85% or more questions correctly.

Outcome 2 - Method 1 - Result

Results:

Students were required to critique incorrectly-prepared flowchart segments, and draw corrected segments. Students also answered essay questions related to cloud computing & system implementation. **82% met or exceeded the expectation.**

Action Plan:

Continue to emphasize development of analytical and critical thinking skills through in-class discussion and hands-on application of concepts.

Outcome 2 - Method 2

ACC 5375 (Business Consulting) will use term papers and projects. A rubric will be used to assess performance. It is expected that 80% of the students will meet or exceed expectations as defined by the rubric.

CIS 5368 (Information security) will use out-of-class assignments and assess them with a rubric. It is expected that 80% of students will meet or exceed expectations related to a student's ability to apply analytical and critical thinking skills to evaluate information, solve problems, and make sound decisions in accounting and information technology problems as defined by the rubric. Embedded exam questions will also be used. It is expected that 80% of the students will answer 85% or more questions correctly.

Outcome 2 - Method 2 - Result

Results:

ACC 5375. A series of 4 quizzes covering consulting concepts was used as an outcome measure. **90%** of students met or exceeded the expectation in the fall semester. The rigor of questions used was increased. Although the instructor continued to emphasize in-class discussion and hands-on application, student performance declined during spring semester. Students may not have applied themselves as diligently to studying due to a change in the course point structure when additional technology exercises were added to the class. Performance dropped to **78%** meeting or exceeding the goal.

CIS 5368. One assignment, requiring students to evaluate and explain an article on global assurance, will be used. The course instructor will use a rubric to evaluate the student's solution to the problem. **A minimum of 80% of students in the class have to score a 80% or higher on this problem to demonstrate mastery of this outcome.** During the Fall semester of 2014, the 16 students enrolled in the CIS 5368, Information Security, were assessed by the instructor using an assignment worth 50 points. Exceeded Expectations was defined as a score of 90% or better. **Out of the 16 students, 10 (63%) students exceeded expectations. Met Expectations was defined as 80% to 89%. Five (5) (31%) students met expectations. And one (1) (6%) Did Not Meet Expectations as defined as less than a score of 80%. 94% of the students demonstrate mastery of this outcome.** This Learning Outcomes Assessment is the baseline to measure improvement. A comparison of these 2015 results with 2011 results will provide evidence of improvement. There has been improvement. **The overall percent of exceeding expectations changed from 21% to 63%.**

Action Plan:

CIS 5375. Although results declined, level of rigor and expectation seem appropriate. We will increase opportunities to develop critical thinking skills during in-class discussion and hands-on application of concepts.

CIS 5368. Since overall 63% of the students exceeded expectations, current presentations and evaluation of the course content will continue.

Outcome 3

Category: Student Learning Outcome

Students will use information technology skills in decision making at a level expected of a master's student for practice and research in accounting and information technology used in a business consulting capacity. Students will learn to use information technology (IT) and be able to apply IT in analysis and communication.

IT skills will be evaluated using the following methods:

Outcome 3 - Method 1

In ACC 5371 (Accounting Information Systems), an Excel project will be used. It is expected that 80% of the students will score 85% or better on the project.

CIS 5355 (Database Management Systems) and CIS 5368 (Information Security) will use a rubric to evaluate a set of out-of-class individual assignments/projects. It is expected that 80% of students will meet or exceed expectation with respect to their ability to use information technology (IT) and be able to apply IT in analysis and communication as defined by the rubric. Exam-embedded questions will also be used. It is expected that 80% of the students will answer 85% or more questions correctly.

Outcome 3 - Method 1 - Result

Results:

ACC 5371. In the fall project topics included use of Excel to detect fraudulent transactions, integration of spinners into Excel workbooks, data validation techniques, and conditional formulas in large data sets. 88% met or exceeded the expectations. In the spring access exercises were integrated into the course for the first time in spring semester, and additional Excel exercises were also added to the course materials. Students were successfully able to complete the projects, and some students informally commented that they had learned a lot from the technology exercises. 94% met or exceeded expectations.

ACC 5355. In the academic year (AY) 2014-2015, 12 MSAIT students were assessed via embedded examination questions on their ability to write, test and execute SQL statements to retrieve and process data stored in a relational database to generate required business information. The course instructor found that 50% (6) of the students scored 85% or higher based on the rubric used to evaluate the SQL statement questions.

Action Plan:

ACC 5371. Students continue to meet or exceed expectations. Faculty plan to explore broadening project topics beyond use of Excel. Consider including ERP exercises and/or and XBRL case.

CIS 5355. Based on the results, the course instructor plans to continue to provide in-class practice questions and demos, which seem to enhance students' understanding of SQL concepts and their ability to develop, write and debug SQL statements. In-class quiz will be given to enhance students' performance in writing SQL statements during in-class time-constrained examination.

Evaluation did not take place in CIS 5368 this academic year.

Outcome 3 - Method 2

ACC 5375 (Business Consulting) will use term papers and projects. A rubric will be developed to assess a student's ability to apply IT in analysis and communication in the term paper and the project. It is expected that 80% of the students will use IT and apply IT in analysis and communication at the level that meets or exceeds expectations as defined by the rubric.

Outcome 3 - Method 2 - Result

Results:

The action plan was to recruit McCoy Building Supply to provide a live project, be available to the students to interview, assist in evaluating students' proposals and reports. Students were assessed on the degree to which software selected for McCoy's was appropriate and how well they have researched the software's capabilities. 100% of students met or exceeded expectations in spring and fall .

Action Plan:

The McCoy's project worked very well. Plans are being made to use a new client, Thermon. Thermon is a publicly traded company. The project will the selection of an ERP system based on Thermon's needs.

Outcome 4

Category: Student Learning Outcome

Students will conceptualize a complex issue into a coherent, persuasive written or oral statement. To fulfill the written portion of the outcome, the student will develop well-written reports, memos, and projects that explain findings, organize ideas into a coherent train of thought, and justify a conclusion or recommendation. Students will make effective oral presentations that explain findings, organize ideas into a coherent train of thought, and justify a conclusion or recommendation.

Written and oral communication skills will be assessed using the following methods:

Outcome 4 - Method 1

CIS 5368 (Information Security) will use out-of-class individual assignments/projects. The instructor will use a rubric to evaluate the set of out-of-class assignments. It is expected that 80% of the students will meet or exceed expectations established for written and oral communication skills as defined by the rubric.

Outcome 4 - Method 1 - Result

Results:

A research article project of applied practices will be used. The course instructor will use a rubric to evaluate the student's solution to the problem. A minimum of 80% of students in the class have to score an 80% or higher on this problem to demonstrate mastery of this outcome. During the Fall semester of 2014, the 16 students enrolled in the CIS 5368, Information Security, were assessed by the instructor using an assignment worth 150 points. Exceeded Expectations was defined as a score of 90% or better. Out of the 16 students, 14 (88%) students exceeded expectations. Met Expectations was defined as 80% to 89%. Two (2) (12%) students met expectations. And none (0%) Did Not Meet Expectations as defined as less than a score of 80%. **100% of the students demonstrate mastery of this outcome.**

Action Plan

Since overall 88% of the students exceeded expectations, current presentations and evaluation of the course content will continue. A comparison of these 2015 results with 2011 results will provide evidence of improvement. There has been improvement. The overall percent of exceeding expectations changed from 21% to 88%.

Outcome 4 - Method 2

Oral communication skills will be assessed through student presentations in ACC 5375 (Business Consulting). A rubric will be used for the assessment. It is expected that 80% of students will meet or exceed expectations as defined by the rubric.

Outcome 4 - Method 2 - Result

Results:

Students were given a case and required to present the case to the rest of the class. **100% of students met or exceeded expectations.** This outcome is similar to prior years.

Action Plan:

We plan to raise the expectation goal and provide students with more specifics on effective oral presentations.

Outcome 5

Category: Student Learning Outcome

Students will understand the importance of group dynamics in achieving organizational goals and use the skills needed for effective teamwork. Students will demonstrate an ability to work effectively in teams.

Teamwork skills will be assessed using the following methods:

Outcome 5 - Method 1

In ACC 5375 (Business Consulting). students will be assigned to teams to work on a project or projects. Various aspects of effective, quality teamwork will be assessed based on a rubric. It is expected that 80% of students will meet or exceed expectations as defined by the rubric.

Outcome 5 - Method 1 - Result

Results:

The action plan was to recruit McCoy Building Supply to provide a live project, be available to the students to interview, assist in evaluating students' proposals and reports. The action worked well because of the active participation of McCoy's management and because the of the active participation of McCoy's management and because the project was an actual McCoy's project. 100% of students met or exceeded expectations.

Action Plan:

The McCoy's project worked very well. But for the coming semester, we plan to use a new project. The new client is Thermon. Thermon is a publicly traded company. The project will the selection of an ERP system based on Thermon's needs.

Outcome 5 - Method 2

CIS 5355 (Data Management Systems) will use an out-of-class group projects to assess this skill, using a rubric. It is expected that 80% of students will meet or exceed expectations as defined by the rubric.

Outcome 5 - Method 2 - Result

This outcome was not evaluated in CIS 5355 during the 2015 academic year.

Outcome 6

Category: Student Learning Outcome

Students will apply ethical reasoning for resolution of ethical dilemmas of accounting and information technology. Students will be able to recognize an ethical dilemma, apply ethical reasoning to resolve it and provide support for the resolution and effects on stakeholders.

Ethical reasoning will be assessed in the following methods:

Outcome 6 - Method 1

In ACC 5355 (IT Auditing) cases will be used. A rubric will be used to assess a student's ability to correctly identify the ethical dilemma, apply ethical reasoning and provide support for the resolution. It is expected that 80% of students will meet or exceed expectations as defined by the rubric.

Outcome 6 - Method 1 - Result

Assessment of this outcome was not conducted in ACC 5355 this academic year.

Outcome 6 - Method 2

In CIS 5368 (Information Security) a combination of out-of-class individual assignments/projects and/or exam-embedded questions will be used. The instructor will use a rubric to evaluate this set of out-of-class assignments. It is expected that 80% of students will meet or exceed expectations as defined by the rubric. With respect to exam-embedded questions, it is expected that 80% of the students will answer 85% or more questions correctly.

Outcome 6 - Method 2 - Result

Results:

During the Fall semester of 2014, the 16 students enrolled in the CIS 5368, Information Security, were assessed by the instructor using a test of essay questions worth 250 points. Exceeded Expectations was defined as a score of 90% or better. Out of the 16 students, 7 (44%) students exceeded expectations. Met Expectations was defined as 80% to 89%. Four (4) (25%) students met expectations. And five (5) (31%) Did Not Meet Expectations as defined as less than a score of 80%. **69% of the students demonstrate mastery of this outcome.** A comparison of these 2014 results with 2011 results will provide evidence of improvement. There has been improvement. The overall percent of exceeding expectations changed from 21% to 44%.

Action Plan:

Since overall 31% of the students did not meet expectations, current presentations and evaluation of the course content will be revised.

Outcome 7

Category: Support Service Outcome

The academic program will promote and realize gains in student success.

Outcome 7 - Method 1

Student retention success will be measured by observing one year retention rates of students enrolled in the academic program from their first to second year. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Rates of retention success will be expected to be at or above the university average for this level of program.

Outcome 7 - Method 1 - Result

The number of entering student enrolled in the academic program who returned the second year provided the data to assess retention. In this program, 2 of the 2 students entering in fall of 2013 returned for their second year in fall of 2014 for a one year retention rate of 100.0%, above the university master's level average of 91.7% and meeting the expected target. The 2014-2015 retention rate also remained the same as the 2013-2014 retention rate of 100.0% showing an improvement.

Outcome 7 - Method 2

Student graduation success will be measured by observing the number of graduates from the academic program in during the fall, spring, and summer semesters and comparing the number of graduates to the number of students enrolled in the program. Data will be obtained from the university's certified enrollment records for the fall, spring, and summer semesters. The number of graduates is expected to be at or above the university rate of graduation for this level of program.

Outcome 7 - Method 2 - Result

The number of students graduating from the degree program during the 2014-2015 fall, spring, and summer semesters along with the total number of students enrolled in the program provided the data to assess student graduation success. In this program, 5 of the 20 students enrolled in the program graduated in the fall, spring, and summer semesters for a graduation percentage of 25.0%, below the university Masters average of 37.5% and not meeting the expected target. The percentage of graduates in 2014-2015 fell below the 37.5% of graduates in 2013-2014 showing a decline.

Outcome 8

Category: Support Service Outcome

The academic program will promote and realize diversity among its student population.

Outcome 8 - Method 1

Student gender diversity will be measured by reviewing the number and percentage of male and female students enrolled in the academic program during the fall, spring, and summer semesters. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Student gender diversity will be expected to be balanced (50/50).

Outcome 8 - Method 1 - Result

The number male versus female student enrolled in the academic program during the 2014 fall semester provided the gender data. In this program, 7 of the 20 students or 35.0% were female while 13 of the students or 65.0% were male providing an imbalanced gender distribution and not meeting the expected target. The percentage of female and male student in 2013-2014 was 37.5% and 62.5% respectively; thus, the male-female ratio has become less balanced in 2014-2015.

Outcome 8 - Method 2

Student racial and ethnic diversity will be measured by observing race and ethnicity of students enrolled in the academic program during the fall, spring, and summer semesters. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Student racial and ethnic diversity will be expected to mirror percentages in the population of the state of Texas.

Outcome 8 - Method 2 - Result

The number students of various ethnic backgrounds enrolled in the academic program during the 2014-2015 fall semester provided the data to assess ethnic and racial diversity. In this program, 0 of the 252 students or 0.0% (compared to 0.0% in 2013-2014) were African-American; 2 of the 252 students or 10.0% (compared to 6.3% in 2013-2014) were Hispanic; 11 of the 252 students or 55.0% (compared to 62.5% in 2013-2014) were White, non-Hispanic; 3 of the 252 students or 15.0% (compared to 25.0% in 2013-2014) were of other minority or unknown backgrounds; 4 of the 252 students or 20.0% (compared to 6.3% in 2013-2014) were of non-resident International students. During 2014-2015, the state of Texas population consisted of 9.8% African American, 31.9% Hispanic, 39.0% White, non-Hispanic, 11.9% other minority or unknown background, and 8.3% were of non-resident International students. Thus, the data for this program indicate students represent a racial and ethnic diversity distribution unlike that of other Texas Emerging Research Universities, also indicating that the program is not meeting the expected target. Compared to 2013-2014, the student population in 2014-2015 appears to represent a more diverse background.

Approval History

Approval History Event	Approver
Outcomes Approved Level 1	Ann Watkins (alw120)
Outcomes Approved Level 2	Denise Smart (ds37)
Outcomes Audit Report Submitted	William Chittenden (wc10)
Results Approved Level 1	Ann Watkins (alw120)
Results Approved Level 2	Denise Smart (ds37)
Results Audit Report Submitted	William Chittenden (wc10)