Computer Information Technology (ADC) Assessment Report

2019-20

Learning Outcomes for Computer Information Technology:

1. Students will be able to identify and evaluate information technology infrastructure necessary to meet an organization's business needs.

2. Students will be able to develop, plan and evaluate appropriate processes for managing information systems and information technology projects.

3. Students will be able to design, develop, and evaluate software solutions to meet an organization's business needs.

4. Students will be able to apply their technical knowledge and critical thinking to solve problems.

5. Students will be able to speak about their work with precision, clarity and organization (Oral Communication).

6. Students will be able to write about their work with precision, clarity and organization (Written Communication).

7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand (Information Literacy).

8. Students will be able to understand and create arguments supported by quantitative evidence, and they can clearly communicate those arguments in a variety of formats (Quantitative Reasoning).

9. Students will collaborate effectively in teams.

10. Students will understand the professional, ethical, legal, security and social issues and responsibilities with the implementation and use of information technology.

11. Graduates will be prepared for:
    - careers that use information technology in business, industry, government and the non-profit sector; and
    - graduate study in fields related to information technology.

Assessment Data Mathematical, Information and Computer Sciences
Computer Information Technology (ADC)

Learning Outcome: Students will be able to identify and evaluate information technology infrastructure necessary to meet an organization's business needs.

Outcome Measure: Pass rates on certification exams.

Criteria for Success:
2017-18: By the end of their 4th term:
- 60% of the students will pass the CompTIA A+ exam.
- 60% of the students will pass one additional CompTIA certification exam.

2018-19 and Beyond: By the end of their 4th term (Grossmont) or 3rd term (MiraCosta):
- 80% of the students will be at or above 90% of the score needed to pass the CompTIA A+ exam.
- 80% of the students will be at or above 90% of the score needed to pass one additional CompTIA certification exam.

Aligned with DQP Learning Areas (circle one or more):
1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

Longitudinal Data:

	2017-18	2018-19	2019-20
Percentage Passing CompTIA A+ Exam	33%		
Percentage at or Above 90% of CompTIA A+ Exam Passing Score		87%	68%
Percentage Passing at Least One of CompTIA Network+, Security+ or Project+	60%		
Percentage at or Above 90% for at Least One of CompTIA Network+, Security+ or Project+ Exam Passing Score		94%	86%

Conclusions Drawn from Data:
2017-18: Note that if we include the students who entered the cohort with the A+ certification, then 60% of the students had the A+ certification by the end of their 4th term. Benchmark met for additional certification passing. In 2018-19 we changed the criteria for success to include those students who came close to passing the certification exam. This is because those who "came close" are demonstrating mastery of the material.

Changes to be Made Based on Data:
None beyond adjusting the criteria for success after looking at the data. We are seeing students still having some challenges doing well on the A+ certification exams. We are doing some analysis on that data, but preliminary findings indicate that many of the students with challenges in passing the exam transferred in the coursework that is foundational for A+ as opposed to taking the coursework from PLNU.

Rubric:
Since these are online exams provided by ComTIA, there is no rubric.

**Assessment Data Mathematical, Information and Computer Sciences
Computer Information Technology (ADC)**

Learning Outcome: Students will be able to develop, plan and evaluate appropriate processes for managing information systems and information technology projects.

Outcome Measure: Signature Assignment for a project plan report in CIT334 Project Management

Criteria for Success: 80% of the students should have an average score of at least 80%.

Aligned with DQP Learning Areas (circle one or more):
1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

Longitudinal Data:

	Percentage of students scoring more than 80%		
	2017-18	2018-19	2019-20
Project Plan	77%	84%	85%

Conclusions Drawn from Data:
The students are achieving our benchmark. The small sample size means that variability will occur in the scores.

Changes to be Made Based on Data:
Continue to monitor.

Rubric:
On the next page

Criteria		Outstanding	High Satisfactory	Low Satisfactory	Unsatisfactory
Draft 1	14 - 15 pts	Completeness - 300+ words and includes the company's name, the project's name, the date the project was completed or is be expected to be completed, employee contact names (minimum two people) and an overview of the project and it's strategic and/or tactical purpose.	12 - 13 pts — Completeness - 250 to 300 words or includes all but one of the following: the company's name, the project's name, the date the project was completed or will be expected to be completed, employee contact names (minimum two people) and an overview of the project and it's strategic and/or tactical purpose.	10 - 11 pts — Completeness - 200 to 300 words or includes all but two or three of the following: the company's name, the project's name, the date the project was completed or will be expected to be completed, employee contact names (minimum two people) and an overview of the project and it's strategic and/or tactical purpose.	4 - 9 pts — Completeness -50 to 200 words or is missing all but one or two of the following: the company's name, the project's name, the date the project was completed or will be expected to be completed, employee contact names (minimum two people) and an overview of the project and it's strategic and/or tactical purpose.
	5 pts	Format - No spelling or grammatical errors, meets all APA requirements	4 pts — Format - One or two spelling or grammatical errors, or meets all but one APA requirements	2 - 3 pts — Format - Two or three spelling or grammatical errors, or meets all but two APA requirements	0 - 1 pts — Format - Four spelling or grammatical errors, or does not meet three or more APA formatting requirements.
Draft 2	23 - 25 pts	Completeness - Includes complete information on all of the following: the project name, executive summary, project stakeholders, project description, MOV, project scope, project schedule summary, project budget summary, and terminology and glossary	18 - 22 pts — Completeness - Includes complete information on all but one or two of the following: the project name, executive summary, project stakeholders, project description, MOV, project scope, project schedule summary, project budget summary, and terminology and glossary	11 - 17 pts — Completeness - Includes complete information on all but three to five of the following: the project name, executive summary, project stakeholders, project description, MOV, project scope, project schedule summary, project budget summary, and terminology and glossary	5 - 10 pts — Completeness - Includes complete information on only one to three of the following: the project name, executive summary, project stakeholders, project description, MOV, project scope, project schedule summary, project budget summary, and terminology and glossary
	5 pts	Format - No spelling or grammatical errors, meets all APA requirements	4 pts — Format - One or two spelling or grammatical errors, or meets all but one APA requirements	2 - 3 pts — Format - Two or three spelling or grammatical errors, or meets all but two APA requirements	0 - 1 pts — Format - Four spelling or grammatical errors, or does not meet three or more APA formatting requirements.
Draft 3	32 - 35 pts	Completeness - Includes complete information on all of the following: Updated and corrected content from the second draft, A title page, TOC, project control WBS and Gantt chart, project risk summary, and implementation plan.	29 - 31 pts — Completeness - Includes complete information on all but one or two of the following: Updated and corrected content from the second draft, A title page, TOC, project control WBS and Gantt chart, project risk summary, and implementation plan.	23 - 28 pts — Completeness - Includes complete information on all but three to five of the following: Updated and corrected content from the second draft, A title page, TOC, project control WBS and Gantt chart, project risk summary, and implementation plan.	14 - 22 pts — Completeness - Includes complete information on only one to three of the following: Updated and corrected content from the second draft, A title page, TOC, project control WBS and Gantt chart, project risk summary, and implementation plan.
	5 pts	Format - No spelling or grammatical errors, meets all APA requirements	4 pts — Format - One or two spelling or grammatical errors, or meets all but one APA requirements	2 - 3 pts — Format - Two or three spelling or grammatical errors, or meets all but two APA requirements	0 - 1 pts — Format - Four spelling or grammatical errors, or does not meet three or more APA formatting requirements.
Final Plan	23 - 25 pts	Report Completeness - Includes all updated sections from draft 2 and draft 3.	18 - 22 pts — Report Completeness - Includes all but one or two updated sections from draft 2 and draft 3.	11 - 17 pts — Report Completeness - Includes all but three to five updated sections from draft 2 and draft 3.	5 - 10 pts — Report Completeness - Includes one or two updated sections from draft 2 and draft 3.
	5 pts	Format - No spelling or grammatical errors, meets all APA requirements	4 pts — Format - One or two spelling or grammatical errors, or meets all but one APA requirements	2 - 3 pts — Format - Two or three spelling or grammatical errors, or meets all but two APA requirements	0 - 1 pts — Format - Four spelling or grammatical errors, or does not meet three or more APA formatting requirements.
	14 - 15 pts	Presentation Document - Containing all of the following: Four to six slides reporting the main aspects of the project, slides follow the template provided, slides are engaging, readable and have appropriate graphics and information.	12 - 13 pts — Presentation Document - Containing all but one of the following: Four to six slides reporting the main aspects of the project, slides follow the template provided, slides are engaging, readable and have appropriate graphics and information.	10 - 11 pts — Presentation Document - Containing all but two of the following: Four to six slides reporting the main aspects of the project, slides follow the template provided, slides are engaging, readable and have appropriate graphics and information.	4 - 9 pts — Presentation Document - Containing all but three or more of the following: Four to six slides reporting the main aspects of the project, slides follow the template provided, slides are engaging, readable and have appropriate graphics and information.
	14 - 15 pts	Presentation - Containing all of the following: Lasts between 5 and 7 minutes, well prepared and rehearsed, avoided reading from the screen, clear and concise presentation, responded well to questions, was attentive during other presentations.	12 - 13 pts — Presentation - Containing all but one of the following: Lasts between 5 and 7 minutes, well prepared and rehearsed, avoided reading from the screen, clear and concise presentation, responded well to questions, was attentive during other presentations.	10 - 11 pts — Presentation - Containing all but two or three of the following: Lasts between 5 and 7 minutes, well prepared and rehearsed, avoided reading from the screen, clear and concise presentation, responded well to questions, was attentive during other presentations.	4 - 9 pts — Presentation - Containing all but four of the following: Lasts between 5 and 7 minutes, well prepared and rehearsed, avoided reading from the screen, clear and concise presentation, responded well to questions, was attentive during other presentations.

Assessment Data Mathematical, Information and Computer Sciences
Computer Information Technology (ADC)

Learning Outcome: Students will be able to design, develop, and evaluate software solutions to meet an organization's business needs.

Outcome Measure: Signature Assignment to create a systems plan report in in CIT334 Project Management

Criteria for Success: 80% of the students should have an average score of at least 80%.

Aligned with DQP Learning Areas (circle one or more):
  1. Specialized Knowledge
  2. Broad Integrative Knowledge
  3. Intellectual Skills/Core Competencies
  4. Applied and Collaborative Learning, and
  5. Civic and Global Learning

Longitudinal Data:

	Percentage of students scoring more than 80%		
	2017-18	2018-19	2019-20
System Plan	80%	92%	100%

Conclusions Drawn from Data:
The students are achieving our benchmark. The small sample size means that variability will occur in the scores.

Changes to be Made Based on Data:
Continue to monitor.

Rubric:
See next page.

CIT434 - MIS Systems Plan Rubric

Criteria	Outstanding	High Satisfactory	Low Satisfactory	Unsatisfactory
Draft	5 pts — Company Overview - The overview has all of the following: A description of the organization, what the organization does and who it serves, copy of the company's mission statement that is clearly labeled.	4 pts — Company Overview - The overview has all but one of the following: A description of the organization, what the organization does and who it serves, copy of the company's mission statement that is clearly labeled.	2 - 3 pts — Company Overview - The overview has all but two of the following: A description of the organization, what the organization does and who it serves, copy of the company's mission statement that is clearly labeled.	0 pts — Company Overview - The overview has all but three or more of the following: A description of the organization, what the organization does and who it serves, copy of the company's mission statement that is clearly labeled.
	9 - 10 pts — Strategic Organizational Goals - The goals have all of the following: lists two or more strategic goals of a company that can be support by a new or upgraded Information Systems. Each goal description is complete and explains how the goal aligns with the company's mission	7 - 8 pts — Strategic Organizational Goals - The goals have all but one of the following: lists two or more strategic goals of the company that can be support by a new or upgraded Information Systems. Each goal description is complete and explains how the goal aligns with the company's mission	4 - 6 pts — Strategic Organizational Goals - The goals have the following but each is not clearly stated or one is complete missing: lists two or more strategic goals of the company that can be support by a new or upgraded Information Systems. Each goal description is complete and explains how the goal aligns with the company's mission	1 - 3 pts — Strategic Organizational Goals - The goals have the following but each is poorly stated or one is complete missing: lists two or more strategic goals of the company that can be support by a new or upgraded Information Systems. Each goal description is complete and explains how the goal aligns with the company's mission
	5 pts — Format - No spelling or grammatical errors, meets all APA requirements	4 pts — Format - One or two spelling or grammatical errors, or meets all but one APA requirements	2 - 3 pts — Format - Two or three spelling or grammatical errors, or meets all but two APA requirements	0 - 1 pts — Format - Four spelling or grammatical errors, or does not meet three or more APA formatting requirements
Final Plan Report	9 - 10 pts — Company Overview - The overview has all of the following: Updated from the draft, a description of the organization, what the organization does and who it serves, copy of the company's mission statement that is clearly labeled.	7 - 8 pts — Company Overview - The overview has all but one of the following: Updated from the draft, a description of the organization, what the organization does and who it serves, copy of the company's mission statement that is clearly labeled.	4 - 6 pts — Company Overview - The overview has all but two of the following: Updated from the draft, a description of the organization, what the organization does and who it serves, copy of the company's mission statement that is clearly labeled.	1 - 3 pts — Company Overview - The overview has all but three or more of the following: Updated from the draft, a description of the organization, what the organization does and who it serves, copy of the company's mission statement that are clearly labeled.
	9 - 10 pts — Strategic Organizational Goals - The goals have all of the following: Updated from the draft, lists two or more strategic goals of the company that can be support by a new or upgraded Information Systems. Each goal description is complete and explains how the goal aligns with the company's mission	7 - 8 pts — Strategic Organizational Goals - The goals have all but one of the following: Updated from the draft, lists two or more strategic goals of the company that can be support by a new or upgraded Information Systems. Each goal description is complete and explains how the goal aligns with the company's mission	4 - 6 pts — Strategic Organizational Goals - The goals have the following but each is not clearly stated or one is complete missing: Updated from the draft, lists two or more strategic goals of the company that can be support by a new or upgraded Information Systems. Each goal description is complete and explains how the goal aligns with the company's mission	1 - 3 pts — Strategic Organizational Goals - The goals have the following but each is poorly stated or one is complete missing: Updated from the draft, lists two or more strategic goals of the company that can be support by a new or upgraded Information Systems. Each goal description is complete and explains how the goal aligns with the company's mission
	14 - 15 pts — Technology Assessment - Has all of the following: Describes the current state of technology within the organization, focuses on the current technology assets that are used to support the one or two strategic organizational goals and IS strategic initiatives that are the focus this report.	12 - 13 pts — Technology Assessment - Has all but one of the following: Describes the current state of technology within the organization, focuses on the current technology assets that are used to support the one or two strategic organizational goals and IS strategic initiatives that are the focus this report.	10 - 11 pts — Technology Assessment - Has all but two of the following: Describes the current state of technology within the organization, focuses on the current technology assets that are used to support the one or two strategic organizational goals and IS strategic initiatives that are the focus this report.	4 - 9 pts — Technology Assessment - Poorly describes or is partially missing following: Describes the current state of technology within the organization, focuses on the current technology assets that are used to support the one or two strategic organizational goals and IS strategic initiatives that are the focus this report.
	14 - 15 pts — Technology Goals - Has all of the following: An overview of the organization's technology goals that will be needed to fulfill the strategic goals already identified, explaining how the technology goal will help support and/or fulfill the strategic organization goal identified in the previous section, a clear mapping between the technology goal and the organizational goal, identified the goal on the strategic impact grid.	12 - 13 pts — Technology Goals - Has all but one of the following: An overview of the organization's technology goals that will be needed to fulfill the strategic goals already identified, explaining how the technology goal will help support and/or fulfill the strategic organization goal identified in the previous section, a clear mapping between the technology goal and the organizational goal, identified the goal on the strategic impact grid.	10 - 11 pts — Technology Goals - Has all but two of the following: An overview of the organization's technology goals that will be needed to fulfill the strategic goals already identified, explaining how the technology goal will help support and/or fulfill the strategic organization goal identified in the previous section, a clear mapping between the technology goal and the organizational goal, identified the goal on the strategic impact grid.	4 - 9 pts — Technology Goals - Is missing three or more of the following: An overview of the organization's technology goals that will be needed to fulfill the strategic goals already identified, explaining how the technology goal will help support and/or fulfill the strategic organization goal identified in the previous section, a clear mapping between the technology goal and the organizational goal, identified the goal on the strategic impact grid.
	9 - 10 pts — Information Systems Guidelines - has a complete list of relevant information system guidelines and how they relate to the organizational and technology goals presented in the report.	7 - 8 pts — Information Systems Guidelines - has a mostly complete list of relevant information system guidelines and how they relate to the organizational and technology goals presented in the report.	4 - 6 pts — Information Systems Guidelines - has a semi-incomplete list of relevant information system guidelines and how they relate to the organizational and technology goals presented in the report.	1 - 3 pts — Information Systems Guidelines - has a incomplete list of relevant information system guidelines and how they relate to the organizational and technology goals presented in the report.
	9 - 10 pts — SWOT Analysis of Technology Goals - has a complete SWOT analysis relevant to the report and how it relates to the organizational and technology goals presented in the report.	7 - 8 pts — SWOT Analysis of Technology Goals - has a mostly complete SWOT analysis relevant to the report and how it relates to the organizational and technology goals presented in the report.	4 - 6 pts — SWOT Analysis of Technology Goals - has a semi-incomplete SWOT analysis relevant to the report and how it relates to the organizational and technology goals presented in the report.	1 - 3 pts — SWOT Analysis of Technology Goals - has an incomplete SWOT analysis relevant to the report and how it relates to the organizational and technology goals presented in the report.
	27 - 30 pts — Information Systems Strategic Initiatives - has all the following: The IS Project Name, The high level cost and value of the initiative(s), The risks and mitigations needed to complete the initiative(s), Current and new technology infrastructure needed to successfully complete the initiative(s) and meet the organizational goal, Current and new IT professionals needed to successfully complete the imitative(s), Current and new software needed to successfully complete the initiative(s), Current and new outside contracts or business partners, Current and new processes needed to support the initiative(s), Estimated effort, time and detail costs needed to complete the initiative(s), Identify measurable success criteria.	23 - 26 pts — Information Systems Strategic Initiatives - has all but one or two of the following: The IS Project Name, The high level cost and value of the initiative(s), The risks and mitigations needed to complete the initiative(s), Current and new technology infrastructure needed to successfully complete the initiative(s) and meet the organizational goal, Current and new IT professionals needed to successfully complete the imitative(s), Current and new software needed to successfully complete the initiative(s), Current and new outside contracts or business partners, Current and new processes needed to support the initiative(s), Estimated effort, time and detail costs needed to complete the initiative(s), Identify measurable success criteria.	16 - 22 pts — Information Systems Strategic Initiatives - has all but three or four of the following: The IS Project Name, The high level cost and value of the initiative(s), The risks and mitigations needed to complete the initiative(s), Current and new technology infrastructure needed to successfully complete the initiative(s) and meet the organizational goal, Current and new IT professionals needed to successfully complete the imitative(s), Current and new software needed to successfully complete the initiative(s), Current and new outside contracts or business partners, Current and new processes needed to support the initiative(s), Estimated effort, time and detail costs needed to complete the initiative(s), Identify measurable success criteria.	8 - 14 pts — Information Systems Strategic Initiatives - has all but five or more of the following: The IS Project Name, The high level cost and value of the initiative(s), The risks and mitigations needed to complete the initiative(s), Current and new technology infrastructure needed to successfully complete the initiative(s) and meet the organizational goal, Current and new IT professionals needed to successfully complete the imitative(s), Current and new software needed to successfully complete the initiative(s), Current and new outside contracts or business partners, Current and new processes needed to support the initiative(s), Estimated effort, time and detail costs needed to complete the initiative(s), Identify measurable success criteria.
	9 - 10 pts — Format - No spelling or grammatical errors, meets all APA requirements	7 - 8 pts — Format - One or two spelling or grammatical errors, or meets all but one APA requirements	4 - 6 pts — Format - Two or three spelling or grammatical errors, or meets all but two APA requirements	1 - 3 pts — Format - Four spelling or grammatical errors, or does not meet three or more APA formatting requirements.
Presentation	5 pts — Strategic Goals - Concise and complete overview of strategic goals in presentation document	4 pts — Strategic Goals - Concise or complete overview of strategic goals in presentation document	2 - 3 pts — Strategic Goals - In-concise or incomplete overview of strategic goals in presentation document	0 - 1 pts — Strategic Goals - In-concise and incomplete overview of strategic goals in presentation document
	9 - 10 — Strategic Goals - Concise and complete overview of strategic initiatives.	7 - 8 pts — Strategic Goals - Concise or complete overview of strategic initiatives.	4 - 6 pts — Strategic Goals - In-Concise or incomplete overview of strategic initiatives.	1 - 3 pts — Strategic Goals - In-Concise and incomplete overview of strategic initiatives.
	9 - 10 pts — Professional presentation - Did all of the following: Presentation document is well prepared, the presentation appears to be will rehearsed, presenter has good eye contact, responds well to questions, professional appearance, attentive to other's presentations, completed in 10 to 15 minutes	7 - 8 pts — Professional presentation - Did all but one or two of the following: Presentation document is well prepared, the presentation appears to be will rehearsed, presenter has good eye contact, responds well to questions, professional appearance, attentive to other's presentations, completed in 10 to 15 minutes	4 - 6 pts — Professional presentation - Did all but three or four of the following: Presentation document is well prepared, the presentation appears to be will rehearsed, presenter has good eye contact, responds well to questions, professional appearance, attentive to other's presentations, completed in 10 to 15 minutes	1 - 3 pts — Professional presentation - Did all but one to two of the following poorly: Presentation document is well prepared, the presentation appears to be will rehearsed, presenter has good eye contact, responds well to questions, professional appearance, attentive to other's presentations, completed in 10 to 15 minutes
	5 pts — Format - No spelling or grammatical errors, meets all APA requirements	4 pts — Format - One or two spelling or grammatical errors, or meets all but one APA requirements	2 - 3 pts — Format - Two or three spelling or grammatical errors, or meets all but two APA requirements	0 - 1 pts — Format - Four spelling or grammatical errors, or does not meet three or more APA formatting requirements.

Assessment Data Mathematical, Information and Computer Sciences
Computer Information Technology (ADC)

Learning Outcome: Students will be able to apply their technical knowledge and critical thinking to solve problems.

Outcome Measure:
- Pass rates on certification exams.
- ETS Proficiency Profile (critical thinking)

Criteria for Success:
2017-18: By the end of their 4th term:
- 60% of the students will pass the CompTIA A+ exam.
- 60% of the students will pass one additional CompTIA certification exam.

2018-19 and Beyond**:** By the end of their 4th term:
- 80% of the students will be at or above 90% of the score needed to pass the CompTIA A+ exam.
- 80% of the students will be at or above 90% of the score needed to pass one additional CompTIA certification exam.

70% of the students will be marginal or proficient at Level 2 Reading/Critical Thinking.

Aligned with DQP Learning Areas (circle one or more):
1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

Longitudinal Data:

	2017-18	**2018-19**	**2019-20**
Percentage Passing CompTIA A+ Exam	33%		
Percentage at or Above 90% of CompTIA A+ Exam Passing Score		87%	68%
Percentage Passing at Least One of CompTIA Network+, Security+ or Project+	60%		
Percentage at or Above 90% for at Least One of CompTIA Network+, Security+ or Project+ Exam Passing Score		94%	86%

	Percentage of Students Marginal or Proficient		
	2017-18	2018-19	2019-20
ETS Proficiency Profile Level 2 Critical Thinking	60%	52%	60%

Conclusions Drawn from Data:
Certification Exams: 2017-18: Note that if we include the students who entered the cohort with the A+ certification, then 60% of the students had the A+ certification by the end of their 4th term. Benchmark met for additional certification passing. In 2018-19 we changed the criteria for success to include those students who came close to passing the certification exam. This is because those who "came close" are demonstrating mastery of the material.

ETS: The students are close but missing the target. The department will be looking at the specific skills measured by the test and see if there are locations where the curriculum can be strengthened to reinforce these skills.

Changes to be Made Based on Data:
None beyond adjusting the criteria for success after looking at the data. We are seeing students still having some challenges doing well on the A+ certification exams. We are doing some analysis on that data, but preliminary findings indicate that many of the students with challenges in passing the exam transferred in the coursework that is foundational for A+ as opposed to taking the coursework from PLNU.

Changes pending more analysis of the ETS instrument.

Rubric:
Since these are online exams provided by ComTIA, there is no rubric.

The ETS exam has no rubric

**Assessment Data Mathematical, Information and Computer Sciences
Computer Information Technology**

Learning Outcome:

PLO: Students will be able to speak about their work with precision, clarity and organization (Oral Communication).

GELO 1b: Oral: Students will be able to effectively express ideas and information to others through oral communication.

Outcome Measure: Annual: Each student will be required to give an oral presentation on a topic in their field as a part of their participation in the Senior Seminar (CIT481). The audience for this talk will include department faculty, fellow students and possibly some alumni. The students will be given the evaluation criteria in advance of their presentation and will be rated by the faculty using a rubric with a scale of 4 (outstanding) to 1 (unsatisfactory) in the following areas:

- Command of background material
- Organization
- Oral presentation skills
- Use of presentation tools
- Ability to field questions from the audience

Criteria for Success: 80% of the students should have an average score of at least 2.5 in each of the major areas in the department rubric.

Aligned with DQP Learning Areas (circle one or more):
1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

Longitudinal Data:

Oral Presentation	2017-18	2018-19	2019-20
Background	100%	100%	97%
Organization	100%	100%	100%
Oral Presentation Skills	100%	100%	100%
Presentation Tools	100%	100%	100%
Ability to Field Questions	100%	100%	100%

Conclusions Drawn from Data:
Our cohorts are consistently meeting the benchmark. This is not surprising since we have students give oral presentations in most classes.

Changes to be Made Based on Data:
We noticed that the students did not fully understand all categories in the rubric and additional time will be spent reviewing the rubric with them before they prepare their oral presentations

Oral Presentation Rubric Update (4/12/17)

Criteria	Outstanding	High Satisfactory	Low Satisfactory	Unsatisfactory
Command of background material	☐ Clearly knows material and key facts by memory ☐ Expands on PPT slides ☐ Content appropriate for audience	☐ Clearly knows key facts with a few memory slips ☐ Some expansion on PPT slides ☐ Partial audience adaptation of content	☐ Reads some information; knows some facts from memory ☐ No expansion of PPT slide content ☐ Little audience adaptation of content	☐ Reads sentences from slides ☐ Dependent on notes ☐ Lacks audience adaptation of content
Organization	☐ Clear and concise outline ☐ Relevant graphics and key text items on slides ☐ Presentation is between 10-15 minutes	☐ Clear outline ☐ Too much information on slides (not concise) ☐ Presentation 1 minute outside of the range (10-15 minutes)	☐ Some sense of outline ☐ Too much detailed information on slides ☐ Presentation 2 minutes outside of the range (10-15 minutes)	☐ No clear outline ☐ Slides are in paragraphed; too much detailed information on one slide ☐ Presentation 3 minutes outside of the range (10-15 minutes)
Oral Presentation skills	☐ Clearly has practiced several times; smooth transitions ☐ Engages audience in content multiple time and engagement is well connected to talk (questions, examples, etc) ☐ Free of disfluencies (ah, uhm) ☐ Is clearly heard in the room and makes an uses inflection for emphasis ☐ Engaged audience through eye contact ☐ Engaged audience through gestures	☐ Has practiced but transitions are not smooth ☐ Engages audience at least twice in content (questions, examples, etc.) ☐ A few disfluencies (ah, umh, er) ☐ Can be understood most of the time and uses some inflection ☐ Some engagement of audience through eye contact ☐ Some engagement of audience through gestures	☐ Has practiced presentation but cannot verbally make transitions between slides ☐ Audience engagement at least once with content (questions, examples, etc.) ☐ Many disfluencies (ah, umh, er) ☐ Can sometimes be understood and uses little inflection ☐ Infrequent eye contact ☐ Distracting gestures or mannerisms	☐ Clearly did not practice presentation; Does not anticipate content of next slide ☐ No audience involvement ☐ Disfluencies (ah, umh, er) detract from presentation ☐ Can not be heard and/or speaks in a monotone ☐ Little audience awareness or eye contact ☐ Frequent distracting gestures or mannerisms
Use of Presentation Tools	☐ PPT background is matched to content, legible font, seamless transitions ☐ Graphics imbedded and matched to topic, necessary hyperlinks work	☐ Appropriate PPT slide backgrounds, transitions & font ☐ Most graphics imbedded and matched to topic, most necessary hyperlinks work	☐ Distracting PPT slide backgrounds and transitions, font hard to read ☐ Some inappropriate graphics or use of PPT embellishments, necessary hyperlinks don't work	☐ No attention given to PPT slide backgrounds and transitions, font illegible ☐ Distracting use of embellishments, graphics not connected to topic
Ability to field questions	☐ Able to answer questions clearly and without hesitation and prepared material to answer anticipated questions	☐ Can answer all questions with some hesitation	☐ Able to answer half of the questions with hesitation	☐ Unable to answer any questions

Assessment Data Mathematical, Information and Computer Sciences
Computer Information Technology (ADC)

Learning Outcome:

PLO: Students will be able to write about their work with precision, clarity and organization (Written Communication).

GELO 1a: Written: Students will be able to effectively express ideas and information to others through written communication.

Outcome Measure:
Annual: Each student will be required to write a paper on a topic in their field as a part of their participation in the Senior Seminar. The audience for this talk will include department faculty, fellow students and possibly some alumni. The students will be given the evaluation criteria in advance of their presentation and will be rated by the faculty using a rubric with a scale of 4 (outstanding) to 1 (unsatisfactory) in the following areas:

- Structure
- Organization
- Grammar and spelling
- Depth of information
- Clarity of writing
- Bibliography and other supporting documentation

Annual: ETS Proficiency Profile.

Criteria for Success: 70% of the students should have an average score of at least 2.5 in each of the major areas in the department rubric.

ETS: 60% of our students will be marginal or proficient on the Level 2 Writing test.

Aligned with DQP Learning Areas (circle one or more):
1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

Longitudinal Data:

Writing Report	2017-18	2018-19	2019-20
Structure	100%	100%	100%
Organization	83%	100%	100%
Grammar and Spelling	100%	100%	100%
Depth of Information	100%	100%	100%
Clarity of Writing	100%	100%	100%
Bibliography and support	100%	100%	100%

ETS:

	Percentage of Students Marginal or Proficient		
	2017-18	2018-19	2019-20
ETS Proficiency Profile Level 2 Writing	20%	39%	27%

Conclusions Drawn from Data:
We now have a few years of data and are looking carefully at the discrepancies. The students have done well on the department rubric but not well on the ETS test. We are reviewing the material on the ETS exam.

Changes to be Made Based on Data:
No changes at this time, we are monitoring progress and reviewing the instruments.

Rubrics:

MICS Writing Rubric: Next page

ETS: No rubric

MICS Written Presentation Rubric

Criteria	Outstanding	High Satisfactory	Low Satisfactory	Unsatisfactory
Bibliography and supporting documents	☐ Multiple references from distinct reputable sources	☐ Most references from distinct reputable sources	☐ Some references from reputable sources	☐ No bibliography or all references from untrusted sites on the internet
	☐ References cited in the body of the document	☐ Some citation of references in the body of the document	☐ Limited citation of references in the body of the document	☐ No citation of references in the body of the document
Organization	☐ Conveys a central theme with all ideas connected, arrangement of ideas clearly related to topic	☐ Conveys a central idea or topic with some ideas connected to the topic	☐ Attempts to focus on an idea or topic with many ideas not connected to the topic	☐ Has little or no focus on central idea or topic
	☐ Clear introduction, body (with sections), and conclusion includes summary and closure	☐ Includes introduction, body and conclusion	☐ Introduction, body, conclusion detectable but not clear	☐ Introduction, body or conclusion absent
	☐ Includes both an abstract and table of contents	☐ Includes abstract and table of contents (one partial and one complete)	☐ Includes partial abstract and partial table of contents	☐ No abstract or table of contents
Grammar and spelling	☐ No use of first- person tense	☐ Few uses of the first-person tense	☐ Several uses of the first- person tense	☐ Written in first-person tense
	☐ No grammatical or spelling errors	☐ Few grammatical and spelling errors	☐ Some grammatical and spelling errors	☐ Many grammatical and spelling errors
Depth of information	☐ Appropriately synthesizes information from multiple distinct sources	☐ Synthesis of information from at least three distinct sources	☐ Synthesis of information from at least two distinct sources	☐ Summary reporting of information without synthesis
	☐ Draws conclusions and personal insights from synthesis	☐ At least two personal insights or conclusions stated	☐ At least one personal insight or conclusion stated	☐ No personal insights
	☐ Has the minimum number of pages including penalty pages; subject coverage is excellent	☐ Has the minimum number of pages including penalty pages; subject coverage is good	☐ Has the minimum number of pages including penalty pages; subject coverage is adequate	☐ Does not have the minimum number of pages including penalty pages
Clarity of writing	☐ Sentences flow	☐ Good sentence structure	☐ Occasional poor sentence structure	☐ Frequent poor sentence structure
	☐ Smooth transitions between paragraphs	☐ Adequate transitions between paragraphs	☐ Transitions between paragraphs unclear	☐ Lacked transitions between paragraphs
	☐ Any and all terms and acronyms are defined	☐ Most terms and acronyms are defined	☐ Some terms and acronyms are defined	☐ Many terms and acronyms are undefined
	☐ Provides evidence to support points	☐ Lacks support for some points	☐ Provides minimal support for points	☐ Ideas not supported

Assessment Data Mathematical, Information and Computer Sciences
Computer Information Technology (ADC)

Learning Outcome:

PLO: Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand (Information Literacy).

GELO 1c: Information Literacy: Students will be able to access and cite information as well as evaluate the logic, validity, and relevance of information from a variety of sources.

Outcome Measure: Annual: Each student will be required to write a paper on a topic in their field as a part of their participation in the Senior Seminar. The audience for this talk will include department faculty, fellow students and possibly some alumni. The students will be given the evaluation criteria in advance and their paper will be rated by the faculty using a rubric with a scale of 4 (capstone) to 1 (benchmark) in the following areas:

- References: Multiple references from distinct reputable sources
- Citation: References cited in the body of the document
- Synthesis: Appropriately synthesizes information from multiple distinct sources.

Criteria for Success: 80% of the students should have an average score of at least 2.5 in each of the major areas.

Aligned with DQP Learning Areas (circle one or more):
1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

Longitudinal Data:

Information Literacy	2017-18	2018-19	2019-20
References	100%	100%	100%
Citation	100%	100%	100%
Synthesis	100%	100%	100%

Conclusions Drawn from Data:
This is the first cohort of graduates in the program and they seem to have done well.

Changes to be Made Based on Data:
Continue to monitor the progress.

Rubric
We used the applicable parts of the writing rubric.

MICS Written Presentation Rubric

Criteria	Outstanding	High Satisfactory	Low Satisfactory	Unsatisfactory
Bibliography and supporting documents	☐ Multiple references from distinct reputable sources	☐ Most references from distinct reputable sources	☐ Some references from reputable sources	☐ No bibliography or all references from untrusted sites on the internet
	☐ References cited in the body of the document	☐ Some citation of references in the body of the document	☐ Limited citation of references in the body of the document	☐ No citation of references in the body of the document
Organization	☐ Conveys a central theme with all ideas connected, arrangement of ideas clearly related to topic	☐ Conveys a central idea or topic with some ideas connected to the topic	☐ Attempts to focus on an idea or topic with many ideas not connected to the topic	☐ Has little or no focus on central idea or topic
	☐ Clear introduction, body (with sections), and conclusion includes summary and closure	☐ Includes introduction, body and conclusion	☐ Introduction, body, conclusion detectable but not clear	☐ Introduction, body or conclusion absent
	☐ Includes both an abstract and table of contents	☐ Includes abstract and table of contents (one partial and one complete)	☐ Includes partial abstract and partial table of contents	☐ No abstract or table of contents
Grammar and spelling	☐ No use of first- person tense	☐ Few uses of the first-person tense	☐ Several uses of the first- person tense	☐ Written in first-person tense
	☐ No grammatical or spelling errors	☐ Few grammatical and spelling errors	☐ Some grammatical and spelling errors	☐ Many grammatical and spelling errors
Depth of information	☐ Appropriately synthesizes information from multiple distinct sources	☐ Synthesis of information from at least three distinct sources	☐ Synthesis of information from at least two distinct sources	☐ Summary reporting of information without synthesis
	☐ Draws conclusions and personal insights from synthesis	☐ At least two personal insights or conclusions stated	☐ At least one personal insight or conclusion stated	☐ No personal insights
	☐ Has the minimum number of pages including penalty pages; subject coverage is excellent	☐ Has the minimum number of pages including penalty pages; subject coverage is good	☐ Has the minimum number of pages including penalty pages; subject coverage is adequate	☐ Does not have the minimum number of pages including penalty pages
Clarity of writing	☐ Sentences flow	☐ Good sentence structure	☐ Occasional poor sentence structure	☐ Frequent poor sentence structure
	☐ Smooth transitions between paragraphs	☐ Adequate transitions between paragraphs	☐ Transitions between paragraphs unclear	☐ Lacked transitions between paragraphs
	☐ Any and all terms and acronyms are defined	☐ Most terms and acronyms are defined	☐ Some terms and acronyms are defined	☐ Many terms and acronyms are undefined
	☐ Provides evidence to support points	☐ Lacks support for some points	☐ Provides minimal support for points	☐ Ideas not supported

Assessment Data Mathematical, Information and Computer Sciences
Computer Information Technology (ADC)

Learning Outcome:

PLO: Students will be able to understand and create arguments supported by quantitative evidence, and they can clearly communicate those arguments in a variety of formats (Quantitative Reasoning).

GELO 1e: Quantitative Reasoning: Students will be able to solve problems that are quantitative in nature.

Outcome Measure: Annual: Each student will participate in the ETS Proficiency Profile exam.

Criteria for Success: 70% of the students will be Marginal or Proficient at Level 2.

Aligned with DQP Learning Areas (circle one or more):
1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

Longitudinal Data:

	Percentage of Students Marginal or Proficient		
	2017-18	2018-19	2019-20
ETS Proficiency Profile Level 2 Math	60%	39%	53%

Conclusions Drawn from Data:
The program has now graduated several cohorts so it is possible to being to look at longitudinal data. We are looking at the particular skills measured by this exam to see what skills need to be reinforced and to determine if this benchmark is appropriate for the CIT student population, particularly since PLNU does not provide their mathematical education. These students transfer in their mathematics coursework.

Changes to be Made Based on Data:
None at this time. We will continue to monitor the results.

Rubrics
ETS Proficiency Profile (no rubric involved)

**Assessment Data Mathematical, Information and Computer Sciences
Computer Information Technology (ADC)**

Learning Outcome: Students will understand the professional, ethical, legal, security and social issues and responsibilities with the implementation and use of information technology.

Outcome Measure: Signature Assignment in CIT434 Management Information Systems

Criteria for Success: 80% of the students should have an average score of 3 or higher for each case.

Aligned with DQP Learning Areas (circle one or more):
1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

Longitudinal Data:

	Percent of 3 or higher		
	2017-18	2018-19	2019-20
Case 1	100%	75%	95%
Case 2	80%	58%	76%
Case 3	100%	92%	92%

Conclusions Drawn from Data:
The students in the first cohort met our benchmarks. The students in the second cohort, which graduated in 18-19, did not. The most recent three cohorts (2019-20 graduates) have been more successful.

Changes to be Made Based on Data:
We made some adjustments to the questions and will continue to monitor progress.

Rubric:

CIT434 - Ethics Response Rubric

Points	1	2	3	4	5
Case 1	Do nothing.	Option between do nothing and confronting the employee or terminating the employee.	Confront him and remove the expenses since they are essentially stealing.	Option between confronting the employee and offering him assistance.	Confront him and remove expense but offer assistance.
Case 2	Use it.	An option between using it and not using it for fear of getting caught, such as making modifications so getting caught is not likely.	Do not use it because you are afraid of getting caught.	An option between not using for fear of getting caught and discussing it with the engineer.	Do not use it because it would be stealing, and discuss with engineer why decision was made.
Case 3	Use it.	An option between using it and not using it for fear of getting caught, such as making modifications so getting caught is not likely.	Do not use it because you are afraid of getting caught.	An option between not using for fear of getting caught and discussing it with the engineer.	Do not use it because it would be stealing, and discuss with engineer why decision was made.