Computer Information Technology (ADC) Assessment Report

2020-21

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.

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	2020-21
Percentage Passing CompTIA A+ Exam	33%			
Percentage at or Above 90% of CompTIA A+ Exam Passing Score		87%	68%	73%
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%	85%

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 in 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.

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 CIT3034 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:

	Percenta	Percentage of students scoring more							
		than 80%							
	2017-18	2018-19	2019-20	2020-21					
Project Plan	77% 84% 85% 90%								

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.
	□ 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.
Final Plan	□ 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.

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 CIT3034 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:

	Percenta	Percentage of students scoring more						
	than 80%							
	2017-18	2018-19	2019-20	2020-21				
System Plan	80% 92% 100% 100%							

Conclusions Drawn from Data: The students are achieving our benchmark.

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

Rubric: See next page.

Cult		Out-4		CIT434 - MIS Systems				Hnki-fk
Criteria	_ 5	Outstanding Company Overview - The overview has all	□ 4	High Satisfactory Company Overview - The overview has all	□ 2	Low Satisfactory Company Overview - The overview has all	0 0	Unsatisfactory Company Overview - The overview has a
	pts	of the following: A description of the organization, what the organization does	pts	but one of the following: A description of the organization, what the organization	! - 3 pts	but two of the following: A description of the organization, what the organization) - 1 pt	but three or more of the following: A description of the organization, what the
		and who it serves, copy of the company's mission statement that is clearly labeled.		does and who it serves, copy of the company's mission statement that is clearly labeled.	S	does and who it serves, copy of the company's mission statement that is clearly labeled.	S	organization does and who it serves, cop of the company's mission statement that is clearly labeled.
	□9-	Strategic Organizational Goals - The goals have all of the following: lists two or more	□7-	Strategic Organizational Goals - The goals have all but one of the following: lists two	п 4-	Strategic Organizational Goals - The goals have the following but each is not clearly	<u> </u>	Strategic Organizational Goals - The goal have the following but each is poorly
Draft.	10 p	strategic goals of the company that can	8 pts	or more strategic goals of the company	6 pts	stated or one is complete missing: lists	3 pts	stated or one is complete missing: lists
Š	S	be support by a new or upgraded Information Systems. Each goal		that can be support by a new or upgraded Information Systems. Each goal		two or more strategic goals of the company that can be support by a new or		two or more strategic goals of the company that can be support by a new or
		description is complete and explains how the goal aligns with the company's mission		description is complete and explains how the goal aligns with the company's mission		upgraded Information Systems. Each goal description is complete and explains how the goal aligns with the company's		upgraded Information Systems. Each go description is complete and explains how the goal aligns with the company's
	_ 5	Format - No spelling or grammatical	4	Format - One or two spelling or	2	mission Format - Two or three spelling or	0	mission Format - Four spelling or grammatical
	pts	errors, meets all APA requirements	pts	grammatical errors, or meets all but one APA requirements	- 3 pts	grammatical errors, or meets all but two APA requirements	- 1 pts	errors, or does not meet three or more APA formatting requirements.
	□9-	Company Overview - The overview has all of the following: Updated from the draft,	□ 7 -	Company Overview - The overview has all but one of the following: Updated from	□4-	Company Overview - The overview has all but two of the following: Updated from	-1-	Company Overview - The overview has but three or more of the following:
	10 pts	a description of the organization, what	8 pts	the draft, a description of the	6 pts	the draft, a description of the	3 pts	Updated from the draft, a description o
		the organization does and who it serves, copy of the company's mission statement that is clearly labeled.		organization, what the organization does and who it serves, copy of the company's mission statement that is clearly labeled.		organization, what the organization does and who it serves, copy of the company's mission statement that is clearly labeled.		the organization, what the organization does and who it serves, copy of the company's mission statement that is clearly labeled.
	□ 9	Strategic Organizational Goals - The goals	0.	Strategic Organizational Goals - The goals		Strategic Organizational Goals - The goals		Strategic Organizational Goals - The go
	1.5	have all of the following: Updated from the draft, lists two or more strategic goals of		have all but one of the following: Updated from the draft, lists two or more strategic	4-6F	have the following but each is not clearly stated or one is complete missing:	1-3p	have the following but each is poorly stated or one is complete missing:
		the company that can be support by a new or upgraded Information Systems.	ts	goals of the company that can be support by a new or upgraded Information	ts	Updated from the draft, lists two or more strategic goals of the company that can	ts	Updated from the draft, lists two or more strategic goals of the company that can
		Each goal description is complete and		Systems. Each goal description is		be support by a new or upgraded Information Systems. Each goal		be support by a new or upgraded
		explains how the goal aligns with the company's mission		complete and explains how the goal aligns with the company's mission		description is complete and explains how		Information Systems. Each goal description is complete and explains how
						the goal aligns with the company's mission		the goal aligns with the company's mission
	4-	Technology Assessment - Has all of the following: Describes the current state of	n 12 - 1	Technology Assessment - Has all but one of the following: Describes the current	□ 10 - 1	Technology Assessment - Has all but two of the following: Describes the current	4-9	Technology Assessment - Poorly describ or is partially missing following: Describ
	15 pts	technology within the organization, focuses on the current technology assets	13 pts	state of technology within the organization, focuses on the current	11 pts	state of technology within the organization, focuses on the current	pts	the current state of technology within torganization, focuses on the current
		that are used to support the one or two strategic organizational goals and IS		technology assets that are used to support the one or two strategic		technology assets that are used to support the one or two strategic		technology assets that are used to support the one or two strategic
		strategic initiatives that are the focus this		organizational goals and IS strategic		organizational goals and IS strategic		organizational goals and IS strategic
		report.		initiatives that are the focus this report.		initiatives that are the focus this report.		initiatives that are the focus this report
	□ 14	Technology Goals - Has all of the following: An overview of the	□ 12·	Technology Goals - Has all but one of the following: An overview of the	□ 10·	Technology Goals - Has all but two of the following: An overview of the	□ 4 -	Technology Goals - Is missing three or more of the following: An overview of
	- 15 p	organization's technology goals that will	- 13 p	organization's technology goals that will	-11 p	organization's technology goals that will	9 pts	organization's technology goals that w
	ts	be needed to fulfill the strategic goals already identified, explaining how the	pts	be needed to fulfill the strategic goals already identified, explaining how the	pts	be needed to fulfill the strategic goals already identified, explaining how the		be needed to fulfill the strategic goals already identified, explaining how the
		technology goal will help support and/or fulfill the strategic organization goal		technology goal will help support and/or fulfill the strategic organization goal		technology goal will help support and/or fulfill the strategic organization goal		technology goal will help support and/o fulfill the strategic organization goal
ť		identified in the previous section, a clear		identified in the previous section, a clear		identified in the previous section, a clear		identified in the previous section, a clea
Report		mapping between the technology goal and the organizational goal, identified the		mapping between the technology goal and the organizational goal, identified the		mapping between the technology goal and the organizational goal, identified the		mapping between the technology goal and the organizational goal, identified
Final Plan Report		goal on the strategic impact grid.		goal on the strategic impact grid.		goal on the strategic impact grid.		goal on the strategic impact grid.
Ē	□9-	Information Systems Guidelines - has a complete list of relevant information	□7-	Information Systems Guidelines - has a mostly complete list of relevant information	□ 4 -	Information Systems Guidelines - has a semi-incomplete list of relevant	-1 -	Information Systems Guidelines - has a incomplete list of relevant information
	10 pts	system guidelines and how they relate to the organizational and technology goals	8 pts	system guidelines and how they relate to the organizational and technology goals	6 pts	information system guidelines and how they relate to the organizational and	3 pts	system guidelines and how they relate the organizational and technology goals
		presented in the report.		presented in the report.		technology goals presented in the report.		presented in the report.
	□9-1	SWOT Analysis of Technology Goals - has a complete SWOT analysis relevant	□7-8	SWOT Analysis of Technology Goals - has a mostly complete SWOT analysis	□4-6	SWOT Analysis of Technology Goals - has a semi-incomplete SWOT analysis	n1-3	SWOT Analysis of Technology Goals - has an incomplete SWOT analysis
	10 pts	to the report and how it relates to the organizational and technology goals	pts	relevant to the report and how it relates to the organizational and technology goals	pts	relevant to the report and how it relates to the organizational and technology goals	pts	relevant to the report and how it relates the organizational and technology goals
		presented in the report. Information Systems Strategic Initiatives -		presented in the report. Information Systems Strategic Initiatives -		presented in the report. Information Systems Strategic Initiatives -		presented in the report. Information Systems Strategic Initiative
	27 - 3	has all the following: The IS Project	23 - 2	has all but one or two of the following:	16-2	has all but three or four of the following:	8-1	has all but five or more of the following
	30 pts	Name, The high level cost and value of the initiative(s), The risks and mitigations	26 pts	The IS Project Name, The high level cost and value of the initiative(s), The risks and	22 pts	The IS Project Name, The high level cost and value of the initiative(s), The risks and	t pts	The IS Project Name, The high level cor and value of the initiative(s), The risks a
		needed to complete the initiative(s), Current and new technology		mitigations needed to complete the initiative(s), Current and new technology		mitigations needed to complete the initiative(s), Current and new technology		mitigations needed to complete the initiative(s), Current and new technolog
		infrastructure needed to successfully		infrastructure needed to successfully		infrastructure needed to successfully		infrastructure needed to successfully
		complete the initiative(s) and meet the organizational goal, Current and new IT		complete the initiative(s) and meet the organizational goal, Current and new IT		complete the initiative(s) and meet the organizational goal, Current and new IT		complete the initiative(s) and meet the organizational goal, Current and new IT
		professionals needed to successfully complete the imitative(s), Current and		professionals needed to successfully complete the imitative(s), Current and		professionals needed to successfully complete the imitative(s), Current and		professionals needed to successfully complete the imitative(s), Current and
		new software needed to successfully complete the initiative(s), Current and		new software needed to successfully complete the initiative(s), Current and		new software needed to successfully		new software needed to successfully complete the initiative(s), Current and
		new outside contracts or business		new outside contracts or business		complete the initiative(s), Current and new outside contracts or business		new outside contracts or business
		partners, Current and new processes needed to support the initiative(s),		partners, Current and new processes needed to support the initiative(s),		partners, Current and new processes needed to support the initiative(s),		partners, Current and new processes needed to support the initiative(s),
		Estimated effort, time and detail costs needed to complete the initiative(s),		Estimated effort, time and detail costs needed to complete the initiative(s),		Estimated effort, time and detail costs needed to complete the initiative(s),		Estimated effort, time and detail costs needed to complete the initiative(s),
		Identify measurable success criteria.		Identify measurable success criteria.		Identify measurable success criteria.		Identify measurable success criteria.
	□9-10	Format - No spelling or grammatical errors, meets all APA requirements	□7-8 p	Format - One or two spelling or grammatical errors, or meets all but one	□4-6 p	Format - Two or three spelling or grammatical errors, or meets all but two	□1-3 p	Format - Four spelling or grammatical errors, or does not meet three or more
) pts 🗆 5	Strategic Goals - Concise and complete	pts 04	APA requirements Strategic Goals - Concise or complete	pts 🗆 2	APA requirements Strategic Goals - In-concise or incomplete	pts 0	APA formatting requirements. Strategic Goals - In-concise and
	5 pts	overview of strategic goals in presentation document	4 pts	overview of strategic goals in presentation document	2 - 3 pts	overview of strategic goals in presentation document	0 - 1 pts	incomplete overview of strategic goals presentation document
	□9	Strategic Goals - Concise and complete	□7	Strategic Goals - Concise or complete	□4.	Strategic Goals - In-Concise or incomplete		Strategic Goals - In-Concise and
	9-10	overview of strategic initiatives.	□ 7 - 8 pts	overview of strategic initiatives.	4 - 6 pts	overview of strategic initiatives.	1 - 3 pts	incomplete overview of strategic initiatives.
rtion	□9-	Professional presentation - Did all of the following: Presentation document is well	□7-	Professional presentation - Did all but one or two of the following: Presentation	п 4-	Professional presentation - Did all but three or four of the following:	-1-	Professional presentation - Did all but to two of the following poorly:
Presentation	. 10 pt:	prepared, the presentation appears to be	8 pts	document is well prepared, the	6 pts	Presentation document is well prepared,	3 pts	Presentation document is well prepare
Pre	S	will rehearsed, presenter has good eye contact, responds well to questions,		presentation appears to be will rehearsed, presenter has good eye		the presentation appears to be will rehearsed, presenter has good eye	ľ	the presentation appears to be will rehearsed, presenter has good eye
		professional appearance, attentive to		contact, responds well to questions,		contact, responds well to questions,		contact, responds well to questions,
		other's presentations, completed in 10 to 15 minutes		professional appearance, attentive to other's presentations, completed in 10 to		professional appearance, attentive to other's presentations, completed in 10 to		professional appearance, attentive to other's presentations, completed in 10
	П		г	15 minutes		15 minutes	Г	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	2-3	Format - Two or three spelling or grammatical errors, or meets all but two	0-1	Format - Four spelling or grammatical errors, or does not meet three or more
	1			APA requirements	pts	APA requirements	. pts	APA formatting requirements.

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	2020-21
Percentage Passing CompTIA A+ Exam	33%			
Percentage at or Above 90% of CompTIA A+		87%	68%	73%
Exam Passing Score		87%	08%	73%
Percentage Passing at Least One of CompTIA	C00/			
Network+, Security+ or Project+	60%			
Percentage at or Above 90% for at Least One				
of CompTIA Network+, Security+ or Project+		94%	86%	85%
Exam Passing Score				

	Percent	age of Stu	idents Mai	rginal or
		Profi	cient	
	2017-18	2018-19	2019-20	2020-21
ETS Proficiency Profile Level 2 Critical Thinking	60%	52%	50%	52%

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

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 Information Technology Project (CIT4081). 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:

	2017-18	2018-19	2019-20	2020-21
Background	100%	100%	97%	100%
Organization	100%	100%	100%	100%
Oral Presentation Skills	100%	100%	100%	100%
Presentation Tools	100%	100%	100%	97%
Ability to Field Questions	100%	100%	100%	97%

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
<u>_</u>	Clearly knows material and key facts by memory	Clearly knows key facts with a few memory slips	Reads some information; knows some facts from memory	Reads sentences from slides
Command of background material	Expands on PPT slides	Some expansion on PPT slides	No expansion of PPT slide content	Dependent on notes
Comn backg mater	Content appropriate for audience	Partial audience adaptation of content	Little audience adaptation of content	Lacks audience adaptation of content
	Clear and concise outline	Clear outline	Some sense of outline	No clear outline
Organization	Relevant graphics and key text items on slides	Too much information on slides (not concise)	Too much detailed information on slides	Slides are in paragraphs; too much detailed information on one slide
Orgar	Presentation is between 10-15 minutes	Presentation 1 minute outside of the range (10-15 minutes)	Presentation 2 minutes outside of the range (10-15 minutes)	Presentation 3 minutes outside of the range (10-15 minutes)
	Clearly has practiced several times; smooth transitions	Has practiced but transitions are not smooth	Has practiced presentation but cannot verbally make transitions between slides	Clearly did not practice presentation; Does not anticipate content of next slide
	Engages audience in content multiple times and engagement is well connected to talk (questions, examples, etc.)	Engages audience at least twice in content (questions, examples, etc.)	Audience engagement at least once with content (questions, examples, etc.)	No audience involvement
ø	Free of disfluencies (ah, uhm)	A few disfluencies (ah, umh, er)	Many disfluencies (ah, umh, er)	Disfluencies (ah, umh, er) detract from presentation
Oral presentation skills	Is clearly heard in the room and uses inflection for emphasis	Can be understood most of the time and uses some inflection	Can sometimes be understood and uses little inflection	Can not be heard and/or speaks in a monotone
resenta	Engages audience through eye contact	Some engagement of audience through eye contact	Infrequent eye contact	Little audience awareness or eye contact
Oral p	Engages audience through gestures	Some engagement of audience through gestures	Distracting gestures or mannerisms	Frequent distracting gestures or mannerisms
tion tools	PPT background is matched to content, legible font, seamless transitions	Appropriate PPT slide backgrounds, transitions & font	Distracting PPT slide backgrounds and transitions, font hard to read	No attention given to PPT slide backgrounds and transitions, font illegible
Use of presentation	Graphics imbedded and matched to topic, necessary hyperlinks work	Most graphics imbedded and matched to topic, most necessary hyperlinks work	Some inappropriate graphics or use of PPT embellishments, necessary hyperlinks don't work	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

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:

	2017-18	2018-19	2019-20	2020-21
Structure	100%	100%	100%	100%
Organization	83%	100%	100%	100%
Grammar and Spelling	100%	100%	100%	100%
Depth of Information	100%	100%	100%	100%
Clarity of Writing	100%	100%	100%	100%
Bibliography and support	100%	100%	100%	100%

ETS:

	Percent	age of Stu Profi	ıdents Maı cient	rginal or
	2017-18	2018-19	2019-20	2020-21
ETS Proficiency Profile Level 2 Writing	20%	39%	27%	44%

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 but it appears that the ETS results are tesint knowledge of grammar rather than the ability to write technically.

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
hy and	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
Bibliography supporting documents	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
	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
Ē	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
Organization	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
	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
Grammar and spelling	No grammatical or spelling errors	Few grammatical and spelling errors	Some grammatical and spelling errors	Many grammatical and spelling errors
	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
Depth of information	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
Depth of	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
	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
Clarity of writing	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
Clarity	Provides evidence to support points	Lacks support for some points	Provides minimal support for points	Ideas not supported

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 (CIT4081). 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 (outstanding) to 1 (unsatisfactory) 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:

	2017-18	2018-19	2019-20	2020-21
References	100%	100%	100%	100%
Citation	100%	100%	100%	100%
Synthesis	100%	100%	100%	100%

Conclusions Drawn from Data: Our graduates are meeting our expectations.

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		
ohy and g ts		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
Bibliography and supporting documents		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
		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
uo		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
Organization		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
and		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
Grammar and spelling		No grammatical or spelling errors	Few grammatical and spelling errors	Some grammatical and spelling errors		Many grammatical and spelling errors
		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
Depth of information		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
Depth o		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
		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
Clarity of writing		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
Clarit		Provides evidence to support points	Lacks support for some points	Provides minimal support for points		Ideas not supported

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				
	2017-18	2018-19	2019-20	2020-21	
ETS Proficiency Profile Level 2	60%	39%	50%	52%	
Quantitative Reasoning	00%	3970	30 70	JZ /0	

Conclusions Drawn from Data: The program has now graduated several cohorts so it is possible to begin 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. Because these students transfer in their mathematical coursework, PLNU is not providing their mathematical education.

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)

Learning Outcome: Students will collaborate effectively in teams.

Outcome Measure: CIT3034 Signature Assignment – evaluation of group while working on a project.

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:

	Percent of students with average at					
	least 2.5					
	2017-18 2018-19 2019-20 201					
Contributes to team meetings	100%	100%	98%	96%		
Met regularly with team	89%					
Encourages team members		95%	96%	95%		
Contributes to project report	100%					
assignments	100%					
Contributes individually outside		97%	95%	91%		
of team meetings		9770	95%	91%		
Attitude		100%	98%	96%		
Fosters constructive team		1000/	98%	95%		
climate		100%	98%	95%		
Responds to conflict	100%	100%	98%	97%		

^{*}Note that the CIT program transitioned to using the department teamwork rubric in 2018-19.

Conclusions Drawn from Data: The students are doing well in teams.

Changes to be Made Based on Data: Continue to make use of group activities throughout the curriculum.

MICS Teamwork Rubric

Definition

Teamwork is behaviors under the control of individual team members (effort they put into team tasks, their manner of interacting with others on the team, and the quantity and quality of contributions they make to team discussions).

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet unsatisfactory (cell one) level performance.

The purpose of this is to evaluate individual team members. Although no team member will ever see your evaluation of them, please take it seriously.

Directions:

- Do not put your own name anywhere on this form, the evaluations are to be anonymous.
- Please fill out one copy of this form for every person who was on your team, including one for yourself.
- For each row, place a checkmark in the box that best describes your teammate's performance.

	Outstanding	High Satisfactory	Low Satisfactory	Unsatisfactory
Contributes to	☐ Helps the team move	☐ Offers new suggestions	☐ Shares ideas but does not	☐ Sits quietly in team
team meetings	forward by articulating the	to advance the work of the	advance the work of the	meetings and does not
	merits of alternative ideas or	group.	group.	contribute.
	proposals.			
Encourages	☐ Actively seeks to find	☐ Offers encouragement to	☐ Offers words of	☐ Does not offer words of
members of the	opportunities to encourage	all members of the team3	encouragement to friends3	encouragement to anyone.
team	all members of the team.			
Individual	☐ Completes all assigned	☐ Completes all assigned	☐ Completes all assigned	☐ Does not complete all
contributions	tasks by deadline; work	tasks by deadline; work	tasks by deadline.	assigned tasks by deadline.
outside of team	accomplished is thorough.	accomplished is thorough.		
meetings	Proactively helps other team			
	members complete their			
	assigned tasks.			
Attitude	□ Demonstrates	□ Demonstrates	□ Demonstrates	□ Demonstrates
	(comments, facial	(comments, facial	(comments, facial	(comments, facial
	expressions, etc.) a negative	expressions, etc.) a negative	expressions, etc.) a negative	expressions, etc.) a negative
	attitude rarely and helps	attitude rarely.	attitude less often than a	attitude more often than a
	others to become more	_	positive attitude.	positive attitude.
	positive.			

Fosters	☐ Supports a constructive	☐ Supports a constructive	☐ Supports a constructive	☐ Supports a constructive
constructive team	team climate by doing all of	team climate by doing any	team climate by doing any	team climate by doing
climate	the following:	two of the following:	one of the following:	none of the following:
	• Treats team members	• Treats team members	Treats team members	Treats team members
	respectfully by being polite	respectfully by being polite	respectfully by being polite	respectfully by being polite
	and constructive in	and constructive in	and constructive in	and constructive in
	communication.	communication.	communication.	communication.
	• Uses positive vocal or	 Uses positive vocal or 	• Uses positive vocal or	Uses positive vocal or
	written tone, facial	written tone, facial	written tone, facial	written tone, facial
	expressions, and/or body	expressions, and/or body	expressions, and/or body	expressions, and/or body
	language to convey a	language to convey a	language to convey a	language to convey a
	positive attitude about the	positive attitude about the	positive attitude about the	positive attitude about the
	team and its work.	team and its work.	team and its work.	team and its work.
	• Motivates teammates by	Motivates teammates by	Motivates teammates by	Motivates teammates by
	expressing confidence	expressing confidence	expressing confidence	expressing confidence
	about the importance of the	about the importance of the	about the importance of the	about the importance of the
	task and the team's ability	task and the team's ability	task and the team's ability	task and the team's ability
	to accomplish it.	to accomplish it.	to accomplish it.	to accomplish it.
Responds to	☐ Identifies and	☐ Identifies and	☐ Identifies and	☐ Will not acknowledge
conflict	acknowledges conflict and	acknowledges conflict and	acknowledges conflict but	that conflict has occurred or
	acknowledges that	acknowledges that	will not acknowledge that	that relationships can be
	relationships can be	relationships can be	relationships can be	damaged.
	damaged. Seeks to restore	damaged.	damaged.	
	relationships.			

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 CIT4034 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	2020-21			
Case 1	100%	75%	95%	84%			
Case 2	80%	58%	76%	68%			
Case 3	100%	92%	92%	94%			

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 last two years of students have been more successful.

Changes to be Made Based on Data: We made some adjustments to the questions and will continue to monitor progress. The four years of data indicate that we should take a closer look at Case 2 to consider why students are not performing as well on that case study.

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 it 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 it 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.

Assessment Data Mathematical, Information and Computer Sciences

Learning Outcome: 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.

Outcome Measure: Annual: Pass rates on certification exams.

Every 5 Years: Alumni will be surveyed every five years. They will be asked at least the following questions:

- 1. If you have a job in Information Technology: On a scale of 1 to 5, 1 being outstanding and 5 being poor, how well do you think that the undergraduate CIT curriculum at PLNU prepared you for your work in the field?
- 2. If you are going to graduate school or went to graduate school: On a scale of 1 to 5, 1 being outstanding and 5 being poor, how well do you think that the undergraduate CIT curriculum at PLNU prepared you for graduate school?

Criteria for Success:

Annual Certification Exams: <u>2017-18</u>: 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.

Alumni Survey: 75% of the respondents say they were well prepared or higher.

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:

Certification Exams:

	2017-18	2018-19	2019-20	2020-21
Percentage Passing CompTIA A+ Exam	33%			
Percentage at or Above 90% of CompTIA A+ Exam Passing Score		87%	68%	73%
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%	85%

Alumni Data: We have not yet given an alumni survey to CIT graduates.

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.

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.

Alumni Survey: This is not rubric scored, but the data is tabulated.