Program Assessment Plan 2021-2023
Information Systems Technology

Information Systems Technology Learning Outcomes

SLO 1: Install components
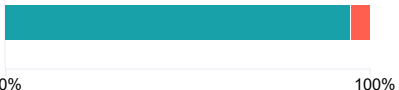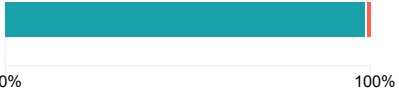
Identify and install computer components

MEASURES	RESULTS	ACTIONS
Measure 1.1 Hands-On Assessment - Student will demonstrate ability to remove a power supply from system case and replace it with a new power supply making all necessary connections. *PC Hardware & Software Lab: INTE 1150* **Target** At least 85% of students will be able to remove a power supply and replace it.	**MET** Measure 1.1 ■ Met ■ Not Met 0% 100% Met: 96% Not Met: 4% Met Total: 96% Not Met Total: 4% **Analysis** Students tended to perform well due to hands-on training provided by instructor(s). Also, students were allowed multiple attempts to replace the power supply before being graded on the exercise. Students also have background knowledge related to computers prior to enrolling in program which aids in the learning process.	**Revise Benchmark / Target** `COMPLETE` Students tend to perform well on this exercise. The performance target for this measure will be increased to raise expectations. The performance standards will be increased in the next cycle: 90% of students will earn a score of 85% (85 out of 100 points) on the Power Supply activity and be able to remove a power supply and replace it.
Measure 1.2 Exam on identification of the major components of a printer system. *PC Hardware & Software Lab: INTE 1150* **Target** At least 80% of students will be able to identify and discuss the major components of printer system	**MET** Measure 1.2 ■ Met ■ Not Met 0% 100% Met: 93% Not Met: 7% Met Total: 93% Not Met Total: 7% **Analysis** Instructors use a diagram to teach students the parts of a printer. Students who performed poorly may not have studied for the multiple choice exam. Due to the type of assessment given, students either knew the information or they didn't.	**Revise Benchmark / Target** `COMPLETE` The performance standard will be modified to include an acceptable assignment in the next cycle: 80% of students will earn a score of 85% on the Printer Identification exam and be able to identify and discuss the major components of printer system. **Other - [Instructional Strategy]** `COMPLETE` Instructors will provide more hands-on application and visual demonstration of printer components to reinforce info that is outlined on the diagram currently being used. Additionally, instructors will implement CompTIA labs when teaching this skill to students.

SLO 2: Troubleshoot computer issues

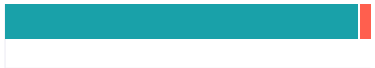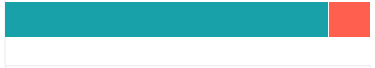Troubleshoot personal computer issues using appropriate techniques and procedures

MEASURES	RESULTS	ACTIONS
Measure 2.1 Performance Evaluation - Install a network printer and ensure the proper driver is loaded *PC Hardware & Software Lab: INTE 1150* **Target** At least 75% of students will be able to understand how to install a network printer and ensure the proper driver is loaded (produce a test sheet).	**MET** Measure 2.1 ■ Met ■ Not Met 0%　　　　　　　　100% Met:　　　　95% Not Met:　　5% Met Total:　　95% Not Met Total:　5% **Analysis** Majority of students met goal. However, some students may have struggled because a printer was not physically available at all campuses to provide the necessary visual and hands-on demonstration/instruction. All campuses are now equipped with a printer to aid in instruction which should ultimately serve to improve the teaching and learning process.	**Revise Benchmark / Target** `COMPLETE` Students tend to perform well on this exercise. The performance target for this measure will be increased to raise expectations. The performance standard will be increased in the next cycle: 80% of students will earn a score of 85% (85 out of 100 points) on the Printer Installation activity and be able to understand how to install a network printer and ensure the proper driver is loaded (produce a test sheet).
Measure 2.2 SOHO Printer Installation *PC Hardware & Software Lab: INTE 1150* **Target** 80% of student will install SOHO multifunction devices/printers and ensure proper driver installation.	**MET** Measure 2.2 ■ Met ■ Not Met 0%　　　　　　　　100% *Values are not shown when too close to each other. Click or use arrow keys to see details.* Met:　　　　99% Not Met:　　1% Met Total:　　99% Not Met Total:　1% **Analysis** In reflection, students are performing well because measure 2.1 essentially mirrors measure 2.2. Faculty believe that it would be beneficial to modify measure 2.2 so that students are able to demonstrate mastery of a new skill related to SLO 2.	**Revise Measurement / Assessment** `COMPLETE` The assessment as well as the performance standard will be modified in the next cycle: 80% of students will earn a score of 85% on the Router Installation activity and be able to successfully simulate the installation of a SOHO router by using CISCO packet tracer.

SLO 3: Operating systems

Install, configure, and maintain an operating system.
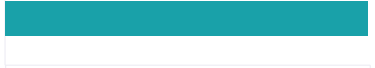
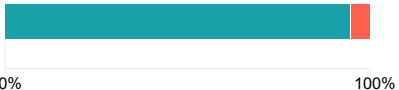| MEASURES	RESULTS	ACTIONS
Measure 3.1 Hands-On Test - Installation an operating system software from bootable USB flash drive.	**MET** Measure 3.1 ■ Met ■ Not Met	**Revise Benchmark / Target** `COMPLETE` Students tend to perform well on this exercise. The performance target for this measure will be

Fundamentals of Client/Server: INTE 2015

Target

At least 80% of students will be able to understand how to use a bootable USB flash drive to install operating system software and drivers and MS Office. Students will create two users accounts and assigned them to the appropriate group.

Met:	97%
Not Met:	3%
Met Total:	97%
Not Met Total:	3%

Analysis

When teaching this skill, instructors provide students multiple modes of learning. Instructors administer content through both lecture and hands-on labs. The practical application helps to reinforce the material taught during lecture which is why faculty believe students perform well.

increased to raise expectations. The performance standard will be increased in the next cycle: 90% of students will earn a score of 85% (94 out of 110 points) on the Operating System Installation activity and be able to understand how to use a bootable USB flash drive to install operating system software and drivers and MS Office. Students will create two users accounts (one of which will include an email account) and assign them to the appropriate group.

Revise Measurement / Assessment

`COMPLETE`

Instructors believe that there is a need for students to also know how to install and configure email account. As such, the assessment will be modified in the next cycle to include an additional task: "Students will create two users accounts (one of which will include an email account) and assign them to the appropriate group."

Measure 3.2

Exam covering working knowledge of Windows operating Systems.

Fundamentals of Client/Server: INTE 2015

Target

At least 80% of students will be able to demonstrate a working knowledge of terminology specific to Windows operating systems.

MET

Measure 3.2

■ Met   ■ Not Met

0%   100%

Met:	89%
Not Met:	11%
Met Total:	89%
Not Met Total:	11%

Analysis

Students are assessed via a multiple choice test. From faculty observation, some students struggle with test-taking. Students who struggled may benefit from additional modes of learning (e.g. visual learning) to help reinforce content delivered through lecture.

Other - [Instructional Strategy]

`COMPLETE`

In an effort to improve teaching and learning, instructors will provide students with additional learning materials to specifically include video demonstrations of content.

Revise Benchmark / Target

`COMPLETE`

Students tend to perform well on this exercise. The performance target for this measure will be increased to raise expectations. The performance standard will be increased in the next cycle: 85% of students will earn a score of 85% on the Window Operating Systems exam and be able to demonstrate a working knowledge of terminology specific to Windows operating systems.

SLO 4: LAN/WAN
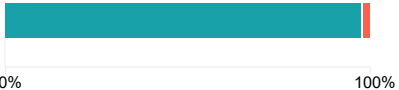
Design and troubleshoot local area and wide area networks.

MEASURES	RESULTS	ACTIONS
Measure 4.1 Hands-On Test - Packet Tracer: Configuring VLANs *Advanced Networking: INTE 2350* **Target** At least 80% of students will be able to understand how to configure initial switch settings for VLAN	**MET** Measure 4.1 ■ Met 0% 100% *Values are not shown when too close to each other. Click or use arrow keys to see details.* Met: 100% Met Total: 100% Not Met Total:	**Revise Benchmark / Target** `COMPLETE` Students tend to perform well on this exercise. The performance target for this measure will be increased to raise expectations. The performance standard will be increased in the next cycle: 90% of students will earn a score of 85% on the VLAN Configuration exam and be able to understand how to configure initial switch settings for VLAN.

Analysis

Instructors have had great success in using the packet tracer simulator software as a teaching and training tool. This resource recently became accessible to faculty. Students tend to perform well because INTE 2350 is an advanced IT class and have already gained the foundational knowledge taught in introductory courses.

Measure 4.2	MET	Revise Benchmark / Target
Exam - Security Assessment	Measure 4.2	COMPLETE
Network Security:Ethical Hack: INTE 2545	■ Met ■ Not Met	Instructors worked to modify and increase the rigor of current exam about a year ago. Students seem to be performing well on the updated assessment. The performance standard will be increased in the next cycle: 85% of students will earn a score of 85% on the Security exam and be able to demonstrate a general knowledge of security in a network environment.
Target		
	0% 100%	
At least 75% of students will be able to demonstrate a general knowledge of security in a network environment.	Met: 95%	
	Not Met: 5%	
	Met Total: 95%	
	Not Met Total: 5%	
	Analysis	
	INTE 2545 is considered an advanced IT course. Students tend to perform well because the topic of security is introduced and reinforced in each course leading up to enrollment in INTE 2545.	

SLO 5: Cloud computing

Design and deploy secure and robust applications utilizing cloud computing technologies

MEASURES	RESULTS	ACTIONS
Measure 5.1	MET	**Revise Measurement / Assessment**
Obtain a Badge from the AWS Academy	Measure 5.1	COMPLETE
Intro to Cloud Computing: INTE 1950	■ Met ■ Not Met	Because the AWS platform may no longer be accessible at the LCTCS level, instructors believe there may be a need transition away from AWS use. There is a need to update measure due to uncertainty surrounding the future use of AWS. New measure will be a 20-question exam that will assess students' basic cloud knowledge using platform that is readily accessible. Exam will be revised to remove AWS language.
Target		
	0% 100%	
At least 75% of students will be able to demonstrate a general knowledge of Cloud Foundations.	Met: 98%	**Revise Benchmark / Target**
	Not Met: 2%	COMPLETE
	Met Total: 98%	The performance standard will be modified to include an acceptable assignment in the next cycle: 75% of students will earn a score of 85% on exam and be able to demonstrate a general knowledge of Cloud Foundations.
	Not Met Total: 2%	
	Analysis	
	Majority of students were able to earn their badge from the AWS Academy. AWS is integrated with Canvas. Students may have performed well here because they are already familiar with the LMS interface which ultimately aided students in earning their badge.	

Measure 5.2

Exam – AWS Assessment Test.

Advanced Cloud Computing: INTE 2950

Target

At least 75% of students will be able to demonstrate a general knowledge of Cloud Foundations

MET

Measure 5.2

■ Met   ■ Not Met

Met:	90%
Not Met:	10%
Met Total:	90%
Not Met Total:	10%

Analysis

Instructors observe that some students experience challenges with test-taking and/or do not properly prepare and study for tests. Due to the practical nature of field of IT, students tend to perform better when completing activities that involve hands-on application or when asked to actually demonstrate their understanding by doing/performing the skill.

Revise Measurement / Assessment

COMPLETE

INTE 2950 exam will test students' knowledge related to advanced cloud computing. Due to uncertainty surrounding the future use of AWS. test questions will be modified to remove AWS specific language.

Revise Benchmark / Target

COMPLETE

The performance standard will be modified to include an acceptable assignment in the next cycle: 75% of students will earn a score of 85% on exam and be able to demonstrate a general knowledge of Advanced Cloud Computing.