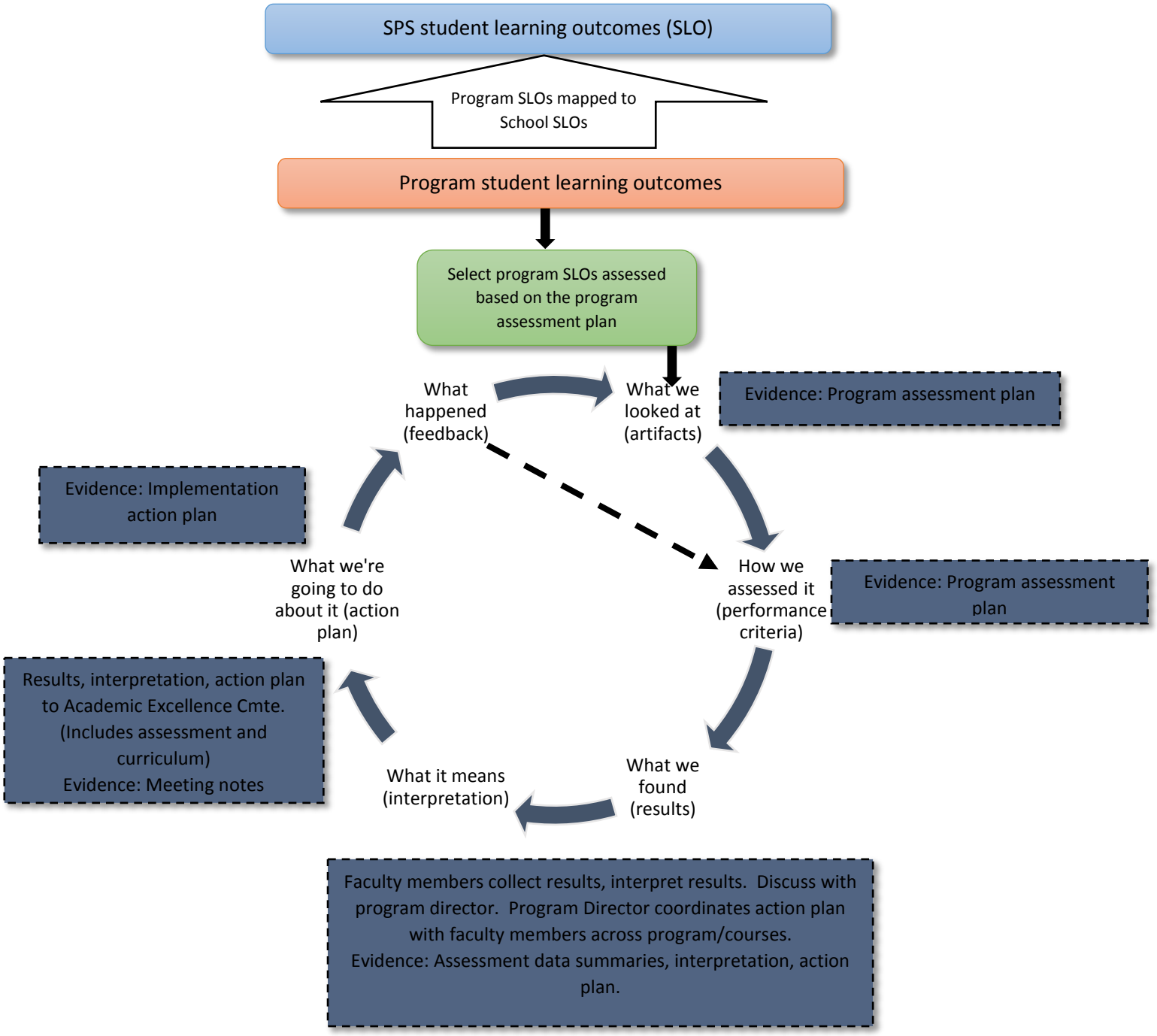
Saint Louis University School for Professional Studies
Program Assessment Model

The School for Professional Studies has adopted the model described in this document for programmatic assessment. Starting with new programs, the model will be phased in for all SPS programs.

The model is designed to illustrate alignment among School, program and course student learning outcomes as well as an ongoing, cyclical assessment process.



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SAINT LOUIS UNIVERSITY.

Program Assessment Plan

Program: Computer Information Systems

Department: N/A

College/School: School for Professional Studies

Date: 9-28-2017

Primary Assessment Contact: John Buerck

Note: Each cell in the table below will expand as needed to accommodate your responses.

#	**Program Learning Outcomes** What do the program faculty expect all students to know, or be able to do, as a result of completing this program? ▪ *Note: These should be measurable, and manageable in number (typically 4-6 are sufficient).*	**Assessment Mapping** From what specific courses (or other educational/professional experiences) will artifacts of student learning be analyzed to demonstrate achievement of the outcome? Include courses taught at the Madrid campus and/or online as applicable.	**Assessment Methods** What specific artifacts of student learning will be analyzed? How, and by whom, will they be analyzed? ▪ *Note: the majority should provide direct, rather than indirect, evidence of achievement.* Please note if a rubric is used and, if so, include it as an appendix to this plan.	**Use of Assessment Data** How and when will analyzed data be used by faculty to make changes in pedagogy, curriculum design, and/or assessment work? How and when will the program evaluate the impact of assessment-informed changes *made in previous years*?
1	An ability to analyze a problem, and to identify and define the computing requirements appropriate to its solution. (ABET-1)	CIS1300, CIS3100, CIS3300, CIS3600, CIS4960, CIS4100, CIS4720, CIS3850, CIS4720, CIS4750,	1. An assessment survey will be completed by each instructor at end of course in which this program learning outcome exists. This survey will inquire about: A) Specific artifact(s) used to demonstrate achievement, B) Strengths/weakness in student performance towards this outcome, C) Number of students who achieved/partially achieved/not achieved the outcome, D) Suggestions on potential changes to the curriculum/pedagogies/artifacts/assessment methods. 2. Exit survey completed by students at end of degree.	Every other year, typically in the spring. The program Director in cooperation with the full-time and adjunct faculty will analyze assessment data and make changes to pedagogy and/or curriculum. Program Directors will follow up on action items from the previous year to determine impact and possible refinements or enhancements moving forward.

			3. The Capstone Projects completed in CIS4960 will be evaluated by the Program Director at the end of each capstone offering using a three-point rubric. Comments and recommendations will be recorded.	
2	An ability to design, implement, and evaluate a computer-based solution to meet a given set of computing requirements in the context of the discipline. (ABET-2)	CIS1600, CIS3100, CIS3300, CIS3600, CIS4960, CIS4300, CIS4600, CIS3850	1. An assessment survey will be completed by each instructor at end of course in which this program learning outcome exists. This survey will inquire about: A) Specific artifact(s) used to demonstrate achievement, B) Strengths/weakness in student performance towards this outcome, C) Number of students who achieved/partially achieved/not achieved the outcome, D) Suggestions on potential changes to the curriculum/pedagogies/artifacts/assessment methods. 2. Exit survey completed by students at end of degree. 3. The Capstone Projects completed in CIS4960 will be evaluated by the Program Director at the end of each capstone offering using a three-point rubric. Comments and recommendations will be recorded.	Every other year, typically in the spring. The program Director in cooperation with the full-time and adjunct faculty will analyze assessment data and make changes to pedagogy and/or curriculum. Program Directors will follow up on action items from the previous year to determine impact and possible refinements or enhancements moving forward.
3	An ability to communicate effectively with a range of audiences about technical information. (ABET-3)	CIS1600, CIS3000, CIS4960, CIS4150, CIS4100, CIS4400	1. An assessment survey will be completed by each instructor at end of course in which this program learning outcome exists. This survey will inquire about: A) Specific artifact(s) used to demonstrate achievement, B) Strengths/weakness in student performance towards this outcome, C) Number of students who achieved/partially achieved/not achieved the outcome, D) Suggestions on potential changes to the curriculum/pedagogies/artifacts/assessment methods. 2. Exit survey completed by students at end of degree. 3. The Capstone Projects completed in CIS4960 will be evaluated by the Program Director at the end of each capstone offering using a three-point rubric. Comments and recommendations will be recorded.	Every other year, typically in the spring. The program Director in cooperation with the full-time and adjunct faculty will analyze assessment data and make changes to pedagogy and/or curriculum. Program Directors will follow up on action items from the previous year to determine impact and possible refinements or enhancements moving forward.

4	An ability to make informed judgments in computing practice based on legal and ethical principles. (ABET-4)	CIS2700, CIS3150, CIS4960, CIS4300, CIS4600, CIS4150, CIS4720, CIS4750, CIS4400	1. An assessment survey will be completed by each instructor at end of course in which this program learning outcome exists. This survey will inquire about: A) Specific artifact(s) used to demonstrate achievement, B) Strengths/weakness in student performance towards this outcome, C) Number of students who achieved/partially achieved/not achieved the outcome, D) Suggestions on potential changes to the curriculum/pedagogies/artifacts/assessment methods. 2. Exit survey completed by students at end of degree. 3. The Capstone Projects completed in CIS4960 will be evaluated by the Program Director at the end of each capstone offering using a three-point rubric. Comments and recommendations will be recorded.	Every other year, typically in the spring. The program Director in cooperation with the full-time and adjunct faculty will analyze assessment data and make changes to pedagogy and/or curriculum. Program Directors will follow up on action items from the previous year to determine impact and possible refinements or enhancements moving forward.
5	An ability to function effectively on teams to establish goals, plan tasks, meet deadlines, manage risk, and produce deliverables. (ABET-5)	CIS3000, CIS3150, CIS4960, CIS4100, CIS4720, CIS4150	1. An assessment survey will be completed by each instructor at end of course in which this program learning outcome exists. This survey will inquire about: A) Specific artifact(s) used to demonstrate achievement, B) Strengths/weakness in student performance towards this outcome, C) Number of students who achieved/partially achieved/not achieved the outcome, D) Suggestions on potential changes to the curriculum/pedagogies/artifacts/assessment methods. 2. Exit survey completed by students at end of degree. 3. The Capstone Projects completed in CIS4960 will be evaluated by the Program Director at the end of each capstone offering using a three-point rubric. Comments and recommendations will be recorded.	Every other year, typically in the spring. The program Director in cooperation with the full-time and adjunct faculty will analyze assessment data and make changes to pedagogy and/or curriculum. Program Directors will follow up on action items from the previous year to determine impact and possible refinements or enhancements moving forward.

Additional Questions

1. On what schedule/cycle will faculty assess each of the above-noted program learning outcomes? *(It is <u>not recommended</u> to try to assess every outcome every year.)*

Program Assessment Schedule

The following schedule provides an annual timeline for assessing the program's student learning outcomes. The assessment schedule will be reviewed annually and modified to address emerging evidence needs for assessment of a particular SLO.

	SLO1	SLO2	SLO3	SLO4	SLO5
AY 2017-18	CIS1300, CIS3100, CIS3300, CIS3600, CIS4960, CIS4100, CIS4720, CIS3850, CIS4720, CIS4750,	CIS1600, CIS3100, CIS3300, CIS3600, CIS4960, CIS4300, CIS4600, CIS3850			
AY 2018-19			CIS1600, CIS3000, CIS4960, CIS4150, CIS4100, CIS4400	CIS2700, CIS3150, CIS4960, CIS4300, CIS4600, CIS4150, CIS4720, CIS4750, CIS4400	
AY 2019-20	CIS1300, CIS3100, CIS3300, CIS3600, CIS4960, CIS4100, CIS4720, CIS3850, CIS4720, CIS4750,	CIS1600, CIS3100, CIS3300, CIS3600, CIS4960, CIS4300, CIS4600, CIS3850			CIS3000, CIS3150, CIS4960, CIS4100, CIS4720, CIS4150
AY 2020-21			CIS1600, CIS3000, CIS4960, CIS4150, CIS4100, CIS4400	CIS2700, CIS3150, CIS4960, CIS4300, CIS4600, CIS4150, CIS4720, CIS4750, CIS4400	

Program Curricular Map

The curriculum map indicates where SLOs are introduced (I), reinforced (R), and evaluated. The map demonstrates how each course contributes to students' meeting the SLOs and help ensures student learning is designed to scaffold from initial introduction to the knowledge/skills/attitudes (KSA), to the opportunity to apply the KSAs to different situations, to evaluation of student's degree of achievement of each SLO.

Computer Information Systems
Accreditation Board for Engineering and Technology (ABET)
Student Learning Objectives
Fall 2017

	1. An ability to analyze a problem, and to identify and define the computing requirements appropriate to its solution.	2. An ability to design, implement, and evaluate a computer-based solution to meet a given set of computing requirements in the context of the discipline.	3. An ability to communicate effectively with a range of audiences about technical information.	4. An ability to make informed judgments in computing practice based on legal and ethical principles.	5. An ability to function effectively on teams to establish goals, plan tasks, and meet deadlines, manage risk and produce deliverables.
Computer Information Systems Core					
CIS 1300 Information Systems & Technology	I				
CIS 1600 Introduction to Programming		I	I		
CIS 2700 Discrete Methods and Models				I	
CIS 3000 Software Engineering			R		I
CIS 3100 Principles of Object Oriented Programming	R	R			
CIS 3150 Workplace Ethics				R	R
CIS 3300 Concepts of Database Analysis and Design	R	R			
CIS 3600 Networking and Telecommunications I	R	R			
PMGT 4030 Project Management Integrative Study			R		R
CIS 4960 CIS Capstone Experience	E	E	E	E	E
Information Security & Assurance					
CIS 4100 Enterprise Architecture	R				R
CIS 4300 The Fundamentals of Computer Forensics		R		R	
CIS 4600 Information Assurance and Security		R		R	
CIS 4720 Enterprise Application Development	R				R
Data Analytics					
CIS 3850 Analytics and Modeling	R	R			
CIS 4150 Cyber Security and Data Governance				R	R
CIS 4720 Enterprise Application Development	R				R
CIS 4750 Data Mining	R			R	
Healthcare Information Systems					
CIS 3850 Analytics and Modeling	R	R			
CIS 4100 Enterprise Architecture			R		R
CIS 4150 Cyber Security and the Data Governance				R	R
CIS 4400 Information Systems in Healthcare Organizations			R	R	
Service Courses					
CIS 1150 Concepts & Applications of Technology	R			R	
CIS 2850 Principles of Data Analysis		R	R		

*Program learning outcome data collected and evaluated in “R” and “E” courses.

2. Describe how, and the extent to which, program faculty contributed to the development of this plan.

The program Director in cooperation with the full-time and adjunct faculty are involved in the development of the courses and their application to each program learning outcome within the plan. These faculties are highly invested in ensuring that course projects and other associated artifacts are created in ways that student performance toward the learning outcome can be distinguished and evidence towards achievement reported.

3. On what schedule/cycle will faculty review and, if needed, modify this assessment plan?

This plan will be reviewed annually to ensure it continues to meet the program's needs. If a given learning outcome indicated areas in need of focused assessment, especially as it relates to one or more courses within the program or a foundational competency, then the schedule may be altered as needed. As SPS programs continually evolve to meet changing market needs, this assessment plan is to be considered dynamic and subject to change as the program evolves and new programs are offered.