Student Learning Outcome 1: Students graduating from the Computer Science Program have the ability to analyze a problem and to identify computing requirements appropriate to its solution.

Table 4. Assessment of Student Learning Outcome 1

Performance Indicator	**Source of assessment**	**Assessment method**	**Time of data collection**	**Target for performance**	**Results**
1. Student understands requirements of computer-based systems	CSIS 3101	Requirement Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
	CSIS 4600	Homework question	Fall 2016	70% of students >= "met" objective	
2. Student analyzes a problem into a logical set of objects or components	CSIS 3460	Design Component of a course project	Fall 2016	70% of students >= "met" objective	
	CSIS 3750	Design Component of a course project	Winter 2017	70% of students >= "met" objective	
	CSIS 4903	Design Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
Indirect evaluation of entire Outcome	Capstone self-evaluation	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	
	Senior Exit Survey	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	

Student Learning Outcome 2: Students graduating from the Computer Science Program have ability to design, implement, and evaluate a computer-based solution to meet a given set of computing requirements in the context of the discipline.

Table 5. Assessment of Student Learning Outcome 2

Performance Indicator	Source of assessment	Assessment method	Time of data collection	Target for performance	Results
1. Student constructs a design involving objects, functions, loops, and conditions, that is easy to understand and can be implemented	CSIS 2101	Requirement Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
	CSIS 3460	Requirement Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
2. Student designs and implements a solution to a complex problem using modern computer languages and tools	CSIS 3050	Design and Implementation Component of a course project	Winter 2017	70% of students >= "met" objective	
	CSIS 3101	Design and Implementation Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
	CSIS 4903	Design and Implementation Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
3. Student devises tests and uses appropriate tools to identify and correct faults	CSIS 3101	Test Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
	CSIS 3750	Test Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
Indirect evaluation of entire Outcome	Capstone self-evaluation	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	
	Senior Exit Survey	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	

Student Learning Outcome 3: Students graduating from the Computer Science Program have the ability to communicate effectively with a range of audiences about technical information.

Table 6. Assessment of Student Learning Outcome 3

Performance Indicator	**Source of assessment**	**Assessment method**	**Time of data collection**	**Target for performance**	**Results**
1. Student writes in a style appropriate for professional audiences	CSIS 3023	Course Assignment	Fall 2016	70% of students >= "met" objective	
	CSIS 4903	Report Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
2. Student organizes material into a structure that is easy to comprehend	CSIS 3750	Report Component of a course project	Winter 2017	70% of students >= "met" objective	
	CSIS 4903	Report Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
3. Student speaks clearly and comprehensibly before an audience of peers	CSIS 3023	Oral Report Component of a course project	Fall 2016	70% of students >= "met" objective	
	CSIS 3750	Oral Report Component of a course project	Winter 2017	70% of students >= "met" objective	
Indirect evaluation of entire Outcome	Capstone self-evaluation	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	
	Senior Exit Survey	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	

Student Learning Outcome 4: Students graduating from the Computer Science Program have the ability to make informed judgments in computing practice based on legal and ethical principles, and identify impacts on individuals and society.

Table 7. Assessment of Student Learning Outcome 4

Performance Indicator	**Source of assessment**	**Assessment method**	**Time of data collection**	**Target for performance**	**Results**
1. Student exhibits knowledge of professional codes of ethics	CSIS 3023	Component of a course assignment	Fall 2016	70% of students >= "met" objective	
	CSIS 4903	Component of a Course Project	Fall 2016	70% of students >= "met" objective	
2. Student follows applicable standards and conventions when writing code	CSIS 2101	Implementation Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
	CSIS 3101	Implementation Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
Indirect evaluation of entire Outcome	Capstone self-evaluation	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	
	Senior Exit Survey	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	

Student Learning Outcome 5: Students graduating from the Computer Science Program have an ability to function effectively on teams to establish goals, plan tasks, meet deadlines, manage risk, and produce deliverables.

Table 8. Assessment of Student Learning Outcome 5

Performance Indicator	**Source of assessment**	**Assessment method**	**Time of data collection**	**Target for performance**	**Results**
1. Student works and collaborates in a diverse team	CSIS 3023	Component of a course assignment	Fall 2016	70% of students >= "met" objective	
	CSIS 3750	Component of a Course Project	Winter 2017	70% of students >= "met" objective	
2. Student accomplishes a fair share of the work	CSIS 3023	Component of a course assignment	Fall 2016, Winter 2017	70% of students >= "met" objective	
	CSIS 3750	Implementation Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
Indirect evaluation of entire Outcome	Capstone self-evaluation	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	
	Senior Exit Survey	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	

Student Learning Outcome 6: Students graduating from the Computer Science Program have an ability to apply theory in the design and implementation of computer-based solutions.

Table 9. Assessment of Student Learning Outcome 6

Performance Indicator	**Source of assessment**	**Assessment method**	**Time of data collection**	**Target for performance**	**Results**
1. Student chooses appropriate algorithms, data structures, and patterns to implement a system or solve a problem	CSIS 2101	Component of a course assignment	Fall 2016, Winter 2017	70% of students >= "met" objective	
	CSIS 3101	Component of a course assignment	Fall 2016, Winter 2017	70% of students >= "met" objective	
	CSIS 3400	Component of a course assignment	Fall 2016, Winter 2017	70% of students >= "met" objective	
	CSIS 4610	Component of a course assignment	Fall 2016, Winter 2017	70% of students >= "met" objective	
Indirect evaluation of entire Outcome	Capstone self-evaluation	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	
	Senior Exit Survey	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	

Student Learning Outcome 7: Students graduating from the Computer Science Program have an ability to reason about and explain computer-based solutions at multiple levels of abstraction.

Table 10. Assessment of Student Learning Outcome 7

Performance Indicator	**Source of assessment**	**Assessment method**	**Time of data collection**	**Target for performance**	**Results**
1. Student explains a complex system in terms of lower level systems	CSIS 3500	Component of a course assignment	Fall 2016	70% of students >= "met" objective	
	CSIS 3810	Component of a course assignment	Fall 2016, Winter 2017	70% of students >= "met" objective	
Indirect evaluation of entire Outcome	Capstone self-evaluation	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	
	Senior Exit Survey	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	

Student Learning Outcome 8: Students graduating from the Computer Science Program have the ability to recognize the ongoing need for additional knowledge and to locate, evaluate, integrate, and apply this knowledge effectively.

Table 11. Assessment of Student Learning Outcome 8

Performance Indicator	**Source of assessment**	**Assessment method**	**Time of data collection**	**Target for performance**	**Results**
1. Student participates in relevant professional organizations, publications, and social media and events	CSIS 3023	Component of a course assignment	Fall 2016	70% of students >= "met" objective	
	CSIS 4903	Component of a Course Project	Fall 2016	70% of students >= "met" objective	
2. Student employs current tools and technologies	CSIS 3023	Component of a course assignment	Fall 2016	70% of students >= "met" objective	
	CSIS 4903	Component of a course project	Fall 2016, Winter 2017	70% of students >= "met" objective	
Indirect evaluation of entire Outcome	Capstone self-evaluation	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	
	Senior Exit Survey	Average scores of two embedded questions in the survey	Fall 2016, Winter 2017	70% of students >= "met" objective	