

# Computer Information Office Systems

## Associate of Applied Science Assessment Plan

### ***I. Mission Statement***

Computer Information Office Systems is a program designed for people interested in securing employment in positions requiring information technology skills.

### ***II. Student Learning Goals and Exit Outcomes***

CIOS is committed to student outcomes assessment and preparing students for their careers. This includes addressing the six UAS competencies: communication, quantitative skills, information literacy, computer usage, professional behavior and critical thinking. In addition, the department has developed a seventh competency for each of the two Associate of Applied Science emphasis areas (Network Technician and Web Development).

1. *Graduates will accurately identify technology solutions to business problems and communicate problems and solutions effectively (UAS competency in Communication). Students will:*
  - 1.1 Knowledge: Attend to, study, comprehend, and articulate a business problem
  - 1.2 Skills: Interpret the correct solution to the business problem and work to communicate related ideas effectively
  - 1.3 Professionalism: Negotiate the task with understanding and respect for the audience
2. *Graduates will use mathematical concepts to solve real world problems (UAS Competency in Quantitative Skills). Students will:*
  - 2.1 Knowledge: Apply quantitative methods to solve real-world problems.
  - 2.2 Skills: Perform necessary arithmetic computations to solve quantitative problems.
3. *Graduates will access appropriate technology resources needed to accomplish specific tasks and accurately implement solutions to complete the tasks. (UAS competency in Information Literacy). Students will:*
  - 3.1 Knowledge: Evaluate the task to define the specific information required and the resources available that provide the information
  - 3.2 Skills: Access the information and synthesize it and/or use it to complete a task
  - 3.3 Professionalism: Communicate and/or present the information accurately and ethically
4. *Graduates will demonstrate efficient use of applications and technology in their program discipline. (UAS competency in Computer Usage). Students will:*
  - 4.1 Knowledge: Understand how best to use the technology for a specific application
  - 4.2 Skills: Use technology effectively and appropriately for a specific application
  - 4.3 Professionalism: Demonstrate responsible use of technology
5. *Graduates will work effectively with others to support organizational goals by assuming responsibility, making ethical decisions and producing quality work. (UAS competency in Professional Behavior). Students will:*
  - 5.1 Knowledge: Understand when and why it is advantageous and appropriate to work with/for others
  - 5.2 Skills: Demonstrate ability to work with others using effective team communication and leadership strategies

- 5.3 Professionalism: Demonstrate democratic behavior, respect for timeliness, and effective leadership qualities to achieve the best outcome
- 6. *Graduates will think critically in solving business and communication tasks. (UAS competency in Critical Thinking). Students will:*
  - 6.1 Knowledge: Analyze key variables involved in a task to identify a correct approach to solving it
  - 6.2 Skills: Utilize the best strategies to accomplish the task
  - 6.3 Professionalism: Accomplish the task in a timely manner, with attention to professional protocols such as presentation, diplomacy, and respect
- 7. *Network Technician emphasis. Students will:*
  - 7.1 Knowledge: Apply network technician concepts in support of the development and maintenance of organizational networking goals.
  - 7.2 Skills: Support organizational IT goals and networking plans through day-to-day installation, maintenance, security, and troubleshooting actions.
  - 7.3 Professionalism: Demonstrate ethical and professional practices of a network technician while accessing and maintaining organizational IT systems and assets.
- 8. *Web development emphasis. Students will:*
  - 8.1 Knowledge: Analyze organizational goals and develop Web sites to support those goals.
  - 8.2 Skills: Apply current Web standards in creating and implementing Web sites.
  - 8.3 Professionalism: Demonstrate the ethical and professional responsibilities of Web developers.

## Curriculum Mapping

**Key:** A(wareness), P(roficiency), M(astery)

### Network Technician map:

Course	Title	1.1	1.2	1.3	2.1	2.2	3.1	3.2	3.3	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	7.1	7.2	7.3
CIOS 105	Computer Literacy				A	A	A	A	P	P	P	P	A	A	A						
CIOS 160	Business English	A	P	P			P	P	P	A	P	A				P	P	P			
CIOS 170	Programming Fundamentals	A	A	A	A	A	A	A		P	P	P	A	A	A	A	A	A		A	A
CIOS 209	Hardware Concepts			A	A		A			A	A	A		A	A	A	A	A	A	A	A
CIOS 210	Operating Systems						P	A		A	A	A	A	A	A	A	A	A	A	A	A
CIOS 241	Introduction to Networking & the OSI Reference Model	A	P	P	A	A	A	A	P	A	A	A	A	P	P	A	A	P	A	A	A
CIOS 244	Internetwork Router Configuration and Design	A		P	P	P	A	P		P	A	A	P	P	P	P	P	P	P	P	A
CIOS 245	Computer Network Concepts & Administration	P	P	P	P	P	P	P	P			P	P						P	P	P
CIOS 247	Local Area network Configuration and Design	P	P	M	M	P	M	M	M	M	P				M	M	M	M	M	M	P
CIOS 248	Wide Area network Configuration and Design	P	M	M	M	M	M	M	M	M	P				M	M	M	M	M	M	P
CIOS 260	Business Communication	P	P	M			P	P		P	P		P	P	P	P	P	M			
CIOS 262	Professional Development						A	P	M	P	P	P	P	P	P	P	P	M			
CIOS 294	Networking Practicum	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M

### Web Development map:

Course	Title	1.1	1.2	1.3	2.1	2.2	3.1	3.2	3.3	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	6.3	7.1	7.2	7.3
CIOS 105	Computer Literacy				A	A	A	A	P	P	P	P	A	A	A						
CIOS 262	Professional Development						A	P	P	P	P	P	P	P	P	P	P	P			
CIOS 108	Design Fundamentals for Computer Apps	A	A	A			A	A	A	P	P	P	P	P	A	A	A	A	A		A
CIOS 152	Digital Image Editing Concepts & Applications			A					P	P	P	P				A	A	A			
ART 222	Digital Camera Photography			A					P	P	P	P				A	A	A			
CIOS 157	Web Site Graphics, Design and HTML	P	P	A			A	P	P	P	P	P	P	P	A	A	A	A	P	P	P
CIOS 170	Programming Fundamentals	A	A	A	A	A	A	A		P	P	P	A	A	A	A	A	A		A	A
CIOS 171	Web Scripting	P	P		A	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P
CIOS 240	Database Concepts and Applications	P		P	A	P			P	P	P	P				P	P	P			
CIOS 257	Advanced Web Site Design and Development	P	P	P					P	M	M	M	P	P	P	P	P	P	P	M	P
CIOS 258	XML and Web Applications	M	M	M	P	P	M	M	M	P	P	P	M	M	M	M	M	M	M	P	M
CIOS 279	Database Theory and SQL					P			P	P	P	P	P	P	P	P	P	P			

## **Assessment Measures and Methods**

### **AAS Network Technician**

Outcome	End-program measure	Assignment
1.1	CIOS 294	Practicum Objectives
1.2	CIOS 248 CIOS 294	Weekly Projects/Final Exam Practicum Objectives
1.3	CIOS 247 CIOS 248 CIOS 294	Weekly Projects/Final Exam Weekly Projects/Final Exam Practicum Objectives
2.1	CIOS 247 CIOS 248 CIOS 294	Weekly Projects/Final Exam Weekly Projects/Final Exam Practicum Objectives
2.2	CIOS 248 CIOS 294	Weekly Projects/Final Exam Practicum Objectives
3.1	CIOS 247 CIOS 248 CIOS 294	Weekly Projects/Final Exam Weekly Projects/Final Exam Practicum Objectives
3.2	CIOS 247 CIOS 248 CIOS 294	Weekly Projects/Final Exam Weekly Projects/Final Exam Practicum Objectives
3.3	CIOS 247 CIOS 248 CIOS 294	Final Exam Final Exam Practicum Objectives
4.1	CIOS 247 CIOS 248 CIOS 294	Weekly Projects/Final Exam Weekly Projects/Final Exam Practicum Objectives
4.2	CIOS 294	Practicum Objectives
4.3	CIOS 294	Practicum Objectives
5.1	CIOS 294	Practicum Objectives
5.2	CIOS 294	Practicum Objectives
5.3	CIOS 247 CIOS 248 CIOS 294	Weekly Projects/Final Exam Weekly Projects/Final Exam Practicum Objectives
6.1	CIOS 247 CIOS 248 CIOS 294	Weekly Projects/Final Exam Weekly Projects/Final Exam Practicum Objectives
6.2	CIOS 247 CIOS 248 CIOS 294	Weekly Projects/Final Exam Weekly Projects/Final Exam Practicum Objectives
6.3	CIOS 247 CIOS 248 CIOS 294	Weekly Projects/Final Exam Weekly Projects/Final Exam Practicum Objectives
7.1	CIOS 247 CIOS 248 CIOS 294	Weekly Projects/Final Exam Weekly Projects/Final Exam Practicum Objectives
7.2	CIOS 247 CIOS 248 CIOS 294	Weekly Projects/Final Exam Weekly Projects/Final Exam Practicum Objectives
7.3	CIOS 294	Practicum Objectives

<b>CIOS S247-K01 Cisco Networking III Course Rubric</b>			
<b>CIOS Exit Outcome</b>	<b>Mastery</b>	<b>Proficient</b>	<b>Awareness</b>
4.0 UAS competency in computer usage: Demonstration of efficient use of applications and technology in their program discipline.			
4.1 Knowledge: Understand how to best use the technology for a specific application.	Score of 90% or better on exams. Ability to perform in the 90% range on hands-on finals.	Score of 80% or better on exams. Ability to perform in the 80% range on hands-on finals.	Score of 70% or better on exams. Ability to perform in the 70% range on hands-on finals.
4.2 Skills: Use technology effectively and appropriately for a specific application.	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands-on finals.	Performs in the 70% range in configurations labs and hands-on finals.
6.1 Professionalism: Knowledge: Analyze key variables involved in a task to identify a correct approach to solving it.	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands	Performs in the 70% range in configurations labs and hands
6.2 Skills: Utilize the best strategies to accomplish the task	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands	Performs in the 70% range in configurations labs and hands
6.3 Professionalism: Accomplish the task in a timely manner, with attention to professional protocols such as presentation, diplomacy, and respect	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands	Performs in the 70% range in configurations labs and hands
7.1 Knowledge: Apply network technician concepts in support of the development and maintenance of organizational networking goals.	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands	Performs in the 70% range in configurations labs and hands
7.2 Skills: Support organizational IT goals and networking plans through day-to-day installation, maintenance, security, and troubleshooting actions.	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands	Performs in the 70% range in configurations labs and hands
7.3 Professionalism: Demonstrate ethical and professional practices of a network technician while accessing and maintaining organizational IT systems and assets.	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands	Performs in the 70% range in configurations labs and hands

<b>CIOS S248-K01 Cisco Networking IV Course Rubric</b>			
<b>CIOS Exit Outcome</b>	<b>Mastery</b>	<b>Proficient</b>	<b>Awareness</b>
4.0 UAS competency in computer usage: Demonstration of efficient use of applications and technology in their program discipline.			
4.1 Knowledge: Understand how to best use the technology for a specific application.	Score of 90% or better on exams. Ability to perform in the 90% range on hands-on finals.	Score of 80% or better on exams. Ability to perform in the 80% range on hands-on finals.	Score of 70% or better on exams. Ability to perform in the 70% range on hands-on finals.
4.2 Skills: Use technology effectively and appropriately for a specific application.	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands-on finals.	Performs in the 70% range in configurations labs and hands-on finals.
6.1 Professionalism: Knowledge: Analyze key variables involved in a task to identify a correct approach to solving it.	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands	Performs in the 70% range in configurations labs and hands
6.2 Skills: Utilize the best strategies to accomplish the task	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands	Performs in the 70% range in configurations labs and hands
6.3 Professionalism: Accomplish the task in a timely manner, with attention to professional protocols such as presentation, diplomacy, and respect	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands	Performs in the 70% range in configurations labs and hands
7.1 Knowledge: Apply network technician concepts in support of the development and maintenance of organizational networking goals.	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands	Performs in the 70% range in configurations labs and hands
7.2 Skills: Support organizational IT goals and networking plans through day-to-day installation, maintenance, security, and troubleshooting actions.	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands	Performs in the 70% range in configurations labs and hands
7.3 Professionalism: Demonstrate ethical and professional practices of a network technician while accessing and maintaining organizational IT systems and assets.	Able to perform in the 90% range in configurations labs and hands-on finals.	Performs in the 80% range in configurations labs and hands	Performs in the 70% range in configurations labs and hands

**CIOS S294-Information Technology Internship Course Rubric**

<b>CIOS Exit Outcome</b>	<b>Mastery</b>	<b>Proficient</b>	<b>Awareness</b>
4.0 UAS competency in computer usage: Demonstration of efficient use of applications and technology in their program discipline.			
4.1 Knowledge: Understand how to best use the technology for a specific application.	Document experience using learned skills to implement a technical solution in the workplace.	Participate with others in the administration of a real network environment solving problems as they arise.	Observe network operations and document how learned concepts are applied in the workplace.
4.2 Skills: Use technology effectively and appropriately for a specific application.	Document experience using learned skills to implement a technical solution in the workplace.	Participate with others in the administration of a real network environment solving problems as they arise.	Observe network operations and document how learned concepts are applied in the workplace.
6.1 Professionalism: Knowledge: Analyze key variables involved in a task to identify a correct approach to solving it.	Document experience using learned skills to implement a technical solution in the workplace.	Participate with others in the administration of a real network environment solving problems as they arise.	Observe network operations and document how learned concepts are applied in the workplace.
6.2 Skills: Utilize the best strategies to accomplish the task	Document experience using learned skills to implement a technical solution in the workplace.	Participate with others in the administration of a real network environment solving problems as they arise.	Observe network operations and document how learned concepts are applied in the workplace.
6.3 Professionalism: Accomplish the task in a timely manner, with attention to professional protocols such as presentation, diplomacy, and respect	Document experience using learned skills to implement a technical solution in the workplace.	Participate with others in the administration of a real network environment solving problems as they arise.	Observe network operations and document how learned concepts are applied in the workplace.
7.1 Knowledge: Apply network technician concepts in support of the development and maintenance of organizational networking goals.	Document experience using learned skills to implement a technical solution in the workplace.	Participate with others in the administration of a real network environment solving problems as they arise.	Observe network operations and document how learned concepts are applied in the workplace.
7.2 Skills: Support organizational IT goals and networking plans through day-to-day installation, maintenance, security, and troubleshooting actions.	Document experience using learned skills to implement a technical solution in the workplace.	Participate with others in the administration of a real network environment solving problems as they arise.	Observe network operations and document how learned concepts are applied in the workplace.
7.3 Professionalism: Demonstrate ethical and professional practices of a network technician while accessing and maintaining organizational IT systems and assets.	Document experience using learned skills to implement a technical solution in the workplace.	Participate with others in the administration of a real network environment solving problems as they arise.	Observe network operations and document how learned concepts are applied in the workplace.

# Computer Information Office Systems Entry/Exit Assessment

*Associate of Applied Science / Networking Emphasis Area*

The following items describe competencies expected of graduates of the University of Alaska Southeast's Computer Information Office Systems Associate of Applied Science with a Networking emphasis.

## **Part 1: Competencies Assessment**

To measure the degree to which you have mastered these competencies, we ask that you rate your level of knowledge prior to entering the program, and then again once you have completed the program. Please circle the number in the appropriate column to indicate your present knowledge for each of the following degree goals (1 = no knowledge, 2 = awareness of topic, 3 = can perform tasks):

**Graduates will accurately identify technology solutions to business networking problems and communicate problems and solutions effectively (UAS competency in Communication). Students will:**

Attend to, study, comprehend, and articulate a business networking problem	1	2	3
Interpret the correct solution to the business networking problem and work to communicate related ideas effectively	1	2	3
Negotiate the task with understanding and respect for the audience	1	2	3

**Graduates will use mathematical concepts to solve real world problems (UAS Competency in Quantitative Skills). Students will:**

Apply quantitative methods to solve real-world networking problems	1	2	3
Perform necessary arithmetic computations to solve quantitative problems	1	2	3

**Graduates will access appropriate technology resources needed to accomplish specific tasks and accurately implement solutions to complete the tasks (UAS competency in Information Literacy). Students will:**

Evaluate the task to define the specific information required and the resources available that provide the information address a networking problem.	1	2	3
Access the information and synthesize it and/or use it to complete a task	1	2	3
Communicate and/or present the information accurately and ethically	1	2	3

**Graduates will demonstrate efficient use of applications and technology in their program discipline (UAS competency in Computer Usage). Students will:**

Understand how best to use networking technology for a specific application.	1	2	3
Use networking technology effectively and appropriately for a specific application.	1	2	3
Demonstrate responsible use of networking technologies	1	2	3

**Graduates will work effectively with others to support organizational goals by assuming responsibility, making ethical decisions and producing quality work (UAS competency in Professional Behavior). Students will:**

Understand when and why it is advantageous and appropriate to work with/for others	1	2	3
Demonstrate ability to work with others using effective team communication and leadership strategies	1	2	3
Demonstrate democratic behavior, respect for timeliness, and effective leadership qualities to achieve the best outcome	1	2	3

**Graduates will think critically in solving business networking and communication tasks. (UAS competency in Critical Thinking). Students will:**

Analyze key variables involved in a task to identify a correct approach to solving it	1	2	3
Utilize the best strategies to accomplish the task	1	2	3
Accomplish the task in a timely manner, with attention to professional protocols such as presentation, diplomacy, and respect	1	2	3

**Students emphasizing in Networking will:**

Apply network technician concepts in support of the development and maintenance of organizational networking goals	1	2	3
Support organizational IT goals and networking plans through day-to-day installation, maintenance, and troubleshooting actions	1	2	3
Demonstrate ethical and professional practices of a network technician while accessing and maintaining organizational IT systems and assets	1	2	3

**Part 2: Additional Skill Assessment:**

<i>Please rate how confident you feel in your ability to do each of the following:</i>					
Please rate how confident you feel in your ability to do each of the following:	(1) Not at all confident	(2) A little confident	(3) Confident	(4) Very Confident	(5) Completely confident
Employ hierarchical network design rules to select appropriate devices for a LAN or WAN environment according to customer needs					
Design and implement an IP addressing scheme using VLSM					
Configure routers and a switches for basic functionality in a network					
Implement Virtual LANs on a switch					
Configure routers using protocols such as RIPv2, OSPF, and EIGRP					
Implement inter-VLAN routing					
Create and apply an Access Control List					

### AAS Web Development

<b>Outcome</b>	<b>Measure</b>	<b>Assignment</b>
1.1	CIOS 258	Final Project
1.2	CIOS 258	Final Project
1.3	CIOS 258	Final Project
2.1		
2.2		
3.1	CIOS 258	Final Project
3.2	CIOS 258	Final Project
3.3	CIOS 258	Final Project
4.1	CIOS 257	Final Project
4.2	CIOS 257	Final Project
4.3	CIOS 257	Final Project
5.1	CIOS 258	Final Project
5.2	CIOS 258	Final Project
5.3	CIOS 258	Final Project
6.1	CIOS 258	Final Project
6.2	CIOS 258	Final Project
6.3	CIOS 258	Final Project
7.1	CIOS 258	Final Project
7.2	CIOS 257	Final Project
7.3	CIOS 258	Final Project

<b>CIOS 257 – Advanced Web Site Design and Development Course Rubric</b>			
<b>CIOS AAS Goal/Exit Outcomes</b>	<b>Mastery</b>	<b>Proficient</b>	<b>Awareness</b>
4.0: UAS Competency in Computer Usage: Graduates will demonstrate efficient use of applications and technology in their program discipline.			
4.1 Knowledge: Understand how best to use the technology for a specific application.	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
4.2 Skills: Use technology effectively and appropriately for a specific application.	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
4.3 Professionalism: Demonstrate responsible use of technology.	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
7.0: Web Development Competencies			
7.2 Skills: Apply current Web standards in creating and implementing Web sites.	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project

<b>CIOS 258 – XML and Web Applications Course Rubric</b>			
<b>CIOS AAS Goal/Exit Outcomes</b>	<b>Mastery</b>	<b>Proficient</b>	<b>Awareness</b>
<b>1.0: UAS Competency in Communication:</b> Graduates will accurately identify technology solutions to business problems and communicate problems and solutions effectively.			
1.1 Knowledge: Attend to, study, comprehend and articulate the presentation of a business problem	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
1.2 Skills: Interpret the correct solution to the business problem and work to communicate related ideas effectively	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
1.3 Professionalism: Negotiate the task with understanding and respect for the audience	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
<b>3.0: UAS Competency in Information Literacy:</b> Graduates will access appropriate technology resources needed to accomplish specific tasks and accurately implement solutions to complete the tasks.			
3.1 Knowledge: Evaluate the task to define the specific information required and the resources available that provide the information.	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
3.2 Skills: Access the information and synthesize it and/or use the information accurately and ethically.	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
3.3 Professionalism: Communicate and/or present the information accurately and ethically.	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
<b>5.0: UAS Competency in Professional Behavior:</b> Graduates will work effectively with others to support organizational goals by assuming responsibility, making ethical decisions and producing quality work.			

5.1 Knowledge: Understand when and why it is advantageous and appropriate to work with/for others.	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
5.2 Skills: Demonstrate ability to work with others using effective team communication and leadership strategies.	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
5.3 Professionalism: Demonstrate democratic behavior, respect for timeliness, and effective leadership qualities to achieve the best outcome.	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
6.0: UAS Competency in Critical Thinking: Graduates will think critically in solving business and communication tasks.			
6.1 Knowledge: Analyze key variables involved in a task to identify a correct approach to solving it	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
6.2 Skills: Utilize the best strategies to accomplish the task	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
6.3 Professionalism: Accomplish the task in a timely manner, with attention to professional	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
7.0: Web Development Competencies			
7.1 Knowledge: Analyze organizational goals and develop Web sites to support those goals.	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project
7.3 Professionalism: Understand the ethical and professional responsibilities of Web developers.	Student scores 90% or better on final project	Student scores 80% or better on final project	Student scores 70% or better on final project

# Computer Information Office Systems Entry/Exit Assessment

## Associate of Applied Science / Web Development Emphasis Area

The following items describe competencies that are expected of graduates of the University of Alaska Southeast's Computer Information Office Systems Associate of Applied Science with an emphasis in Web Development.

To measure the degree to which you have mastered these competencies, we ask that you rate your level of knowledge prior to entering the program, and then again once you have completed the program. Please circle the number in the appropriate column to indicate your present knowledge for each of the following degree goals (1 = no knowledge, 2 = awareness of topic, 3 = can perform tasks):

<b>Graduates will accurately identify technology solutions to business problems and communicate problems and solutions effectively (UAS competency in Communication). Students will:</b>				
Attend to, study, comprehend, and articulate a business problem.	1	2	3	
Interpret the correct solution to the business problem and work to communicate related ideas effectively.	1	2	3	
Negotiate the task with understanding and respect for the audience.	1	2	3	
<b>Graduates will use mathematical concepts to solve real world problems (UAS Competency in Quantitative Skills). Students will:</b>				
Apply quantitative methods to solve real-world problems.	1	2	3	
Perform necessary arithmetic computations to solve quantitative problems.	1	2	3	
<b>Graduates will access appropriate technology resources needed to accomplish specific tasks and accurately implement solutions to complete the tasks. (UAS competency in Information Literacy). Students will:</b>				
Evaluate the task to define the specific information required and the resources available that provide the information.	1	2	3	
Access the information and synthesize it and/or use it to complete a task.	1	2	3	
Communicate and/or present the information accurately and ethically.	1	2	3	
<b>Graduates will demonstrate efficient use of applications and technology in their program discipline. (UAS competency in Computer Usage). Students will:</b>				
Understand how best to use the technology for a specific application.	1	2	3	
Use technology effectively and appropriately for a specific application.	1	2	3	
Demonstrate responsible use of technology.	1	2	3	
<b>Graduates will work effectively with others to support organizational goals by assuming responsibility, making ethical decisions and producing quality work. (UAS competency in Professional Behavior). Students will:</b>				
Understand when and why it is advantageous and appropriate to work with/for others.	1	2	3	
Demonstrate ability to work with others using effective team communication and leadership strategies.	1	2	3	
Demonstrate democratic behavior, respect for timeliness, and effective leadership qualities to achieve the best outcome.	1	2	3	
<b>Graduates will think critically in solving business and communication tasks. (UAS competency in Critical Thinking). Students will:</b>				
Analyze key variables involved in a task to identify a correct approach to solving it.	1	2	3	
Utilize the best strategies to accomplish the task.	1	2	3	
Accomplish the task in a timely manner, with attention to professional protocols such as presentation, diplomacy, and respect	1	2	3	
<b>Students emphasizing in Web Development will:</b>				
Analyze organizational goals and develop Web sites to support those goals.	1	2	3	
Apply current Web standards in creating and implementing Web sites.	1	2	3	
Demonstrate the ethical and professional responsibilities of Web developers.	1	2	3	

### ***Cycle of Assessment, Data Collection Strategy, and Program Improvement***

Outcomes will be assessed at the end of each spring semester. The first assessment will take place in spring 2010 after the new programs have been implemented. . In addition to regular program assessment points identified above, faculty will administer a program exit questionnaire to students at the end of their program capstone course. The data from these questionnaires will be presented to the program advisory council for input on program modifications. Feedback from the advisory council and plans for any modifications will be included in the annual assessment report.