

NTID
Applied Computer Technology Outcomes Assessment
Plan and Report for AY 2008-2009

Program Goal: Provide students with job entry skills to acquire a variety of positions in the computer field as PC Support technicians, Network/Network Security technicians or Web Development technicians.

Critical Outcomes for all Students		Assessment of Outcomes		Timeline		Results	
Domain/Task/Capability	Performance Criteria/Benchmarks	Instrument/Opportunity	Assessment of Performance	Develop	Collect	Summarization of Results	Use of Results
new concentration						No new concentrations were developed.	N/A
1. PC Tech Support (General Technical)	<p>a. <i>Building, Configuring and Maintaining a PC:</i> students will be able to correctly diagnose faults, remove faulty items, install items, and restore to working condition a personal computer.</p> <p>b. <i>Managing and Maintaining an Operating System:</i> students will be able to install, configure, diagnose and maintain operating systems, drivers and application software.</p>	<p>a. To be assessed through hands-on exam at the end of the 0805-217 PC Hardware II course.</p> <p>b. To be assessed through hands-on exam at the end of the 0805-215 PC Operating Systems course.</p>	<p>a. Given a PC with at least 3 random faults, (80% of) all students will be able to perform at a level of 2 or 3 in every measureable category.</p> <p>b. Given the written description of the required configuration of an operating system with its directories and file structures, (80% of) all students will be able to correctly perform a variety of functions including OS installation and configuration, application program installation and management, creation and</p>	<p>a. 20051 and 20052</p> <p>b. 20052 and 20053</p>	<p>a. At the end of each quarter the 0805-217 course is offered starting in 20052.</p> <p>b. At the end of each quarter the 0805-215 course is offered starting in 20053.</p>	Results for b: In the Spring quarter, 20083, 96% (25 of 26 students) were able to perform at a level of 2.0 and 3.0 on the hands-on final for the PC Operating Systems course.	The assessment instrument for PCOS was revised and now more accurately reflects student achievement in the course, and the 80% benchmark was achieved.

			management of directories and file structures, partitioning and preparation of storage media.				
2. Networking (General Technical)	a. <i>Network Security, Networking Essentials and Client/Server Networks:</i> Students will be able to connect, configure, administer, secure and troubleshoot a multi-platform peer-to-peer or client/server network that supports file and print sharing.	a. To occur through a hands-on exam at the end of 0805-226 Client/Server Networks. This will be used to assess all Networking related courses in the first year of the program	a. Given the resources and functional/performance specifications, (80% of) all students will be able to connect, configure, manage, secure and troubleshoot a small intranet peer to peer or client/server network. This will be measured by attaining a 2 or 3 in each measurable task, or a C or above on the hands-on exam.	a. Fall 20051	a. Each quarter the 0805-226 course is offered starting in 20053. Data will be reported as an annual summation, rather than by the quarter in which it is offered.	80% (8 out of 10 students) were able to earn either a C or above on the hands-on final for the Client/Server course.	The 80% benchmark was achieved.
3. Web Development (General Technical)	a. <i>Web page Development:</i> Students will be able to create a multi-page Website using X(HTML) that contains text formatting, graphics, links, forms, tables and style sheets.	a. To occur through a hands-on exam at the end of the 0805-252 Web Development course.	a. Given a written specifications of what students are to develop, (80% of) all students will be able to create a Web site with given criteria using X(HTML). This will be measured by	a. Fall 20051	a. Each quarter the 0805-252 course is offered starting in 20051	Students in the 080-252 Web Development course were assessed in the Fall quarter. Of the 5 students assessed, 4 (80%) achieved a 2 or a 3 on every measurable task.	The 80% benchmark was achieved.

			attaining a 2 or 3 in each measurable task, or a C or above on the hands-on final.				
Program Concentrations: Additional Technical Outcomes							
PC Tech Support (Technical Concentration)	a. <i>Tech Support</i> : Students will be able to support a multi-platform PC business environment including peripherals.	a. To occur through a hands-on final project at the end of 0805-337 Server Management and Security or 0805-350 Computer Interfacing	a. Given a multiplatform simulated business environment, 85% of the students will be able to demonstrate that they can support the repair and maintenance of all computers and computer related peripherals.	a. Winter 20052 & Spring 20053	a. Each quarter the 0805-337 and 0805-350 courses are offered after Spring 20053	18% (3 out of 16 students) were able to earn a C or above on the hands-on final for the Server Management and Security course.	The 85% benchmark was not acheived. The Networking group will consider what revisions need to be made to improve acheivement in this area.
Networking and Cyber Security (Technical Concentration)	a. <i>Networking</i> : Students will be able to install, configure, administer and troubleshoot a small LAN/WAN environment including servers. b. <i>CyberSecurity</i> : Students will be able to secure a LAN/WAN environment.	a. To occur through a hands-on final project at the end of the 0805-337 Server Management and Security course. b. To occur through a hands-on final project at the end of the 0805-338 Firewall and IDS course.	a-b. Given a LAN/WAN environment, 85% of the students will be able to demonstrate they can install, configure, administer, secure and troubleshoot the network.	a-b. Winter 20052 & Spring 20053	a-b. Each quarter the 0805-337 and 0805-338 courses are offered after Spring 20053	a. 18% (3 out of 16 students) acheived a C or better on the hands-on final for the Server Management and Security course. b. 100% (3 out of 3 students) earned a 2 or 3 on the assessment used in the Firewalls and IDS course.	a. The 85% benchmark established for a. was not acheived. The Networking group will consider what revisions need to be made to improve acheivement in this area. b. The 85% benchmark was acheived

							for the Firewalls & IDS course.
Web Development and Database (Technical Concentration)	a. <i>Web Development:</i> Students will be able to develop a professional-level web site that incorporates the skills developed in all of the Web Development concentration courses.	To occur through the assessment of a portfolio developed during the course Advanced Web Development, the “capstone” course in the Web Development concentration. The portfolio will be assessed for students who have taken all four courses in the Web Concentration sequence.	Student work will be reviewed by the course instructor(s) using an assessment rubric which measures performance criteria.	AY 2007-08	At the end of each Spring quarter that Advanced Web Development is offered.	100% (2 out of 2 students) earned an A for the web sites they developed as part of the Advanced Web Development course. Assessments were done this year without the assessment of portfolios.	A greater effort will be made next year to have students develop portfolios are part of their work in the Advanced Web Development course.
Other:	The department will get a clearer understanding of student’s perceptions of the Web Development concentration.	A student survey was developed to assess students’ perceptions of the Web Development concentration to help determine why so few students were choosing that concentration.				Results of the survey indicated that students had misconceptions about the employment potential in this area, and did not like the coding involved in the coursework.	The faculty will be addressing these and other students concerns by incorporating more employment information into course materials, and attempting to make required projects more engaging. Using an outside hosting site for student work will be investigated.
						None conducted	N/A

Student Satisfaction	Graduating students will indicate overall satisfaction with program and courses.	Student Satisfaction Survey	80% of students will indicate they are "very satisfied" or "satisfied" on 2 survey questions: one related to overall program satisfaction and one related to satisfaction with courses.	2005-2006	2006-2007	this year.	
Job Placement	Graduates will be employed in the field.	NCE Placement Data	90% graduates will be employed in the field.		Annually	For AY 2006-2007 n=7; 85.7% of students seeking employment were working.	Benchmarks achieved. No action needed.
Co-op Work Experience	Students will demonstrate technical competency on co-op job.	Co-operative Supervisor Evaluation	80% students will achieve a score of 3 or above (5-point scale) on overall student job performance statement on Co-op Supervisor Evaluation.		Annually, beginning AY 2006-07	For students in the Information and Computing Studies Department the mean rating by co-op supervisors who completed the evaluation online was 4.33 (N=21) during the four quarters 20074-20083.	Benchmarks achieved. No action needed.
Alumni Satisfaction	Alumni will indicate satisfaction with the instruction they received at NTID/RIT	Alumni Survey	80% of Alumni will rate their NTID/RIT experience as Good or Excellent (5-point scale) for the instruction they received.	AY 2007-2008	AY 2007-2008	None conducted this year.	N/A

Comments:

(Summary/Reflections on progress made since AY 2006-2007 Middle States Report)

**PC Tech Support (General Technical) -
PC Hardware II and PC Operating Systems**

In our last report we considered combining these two skill areas into one assessment; however, we have determined that it is best to continue assessing hardware and software separately. We also found that the Student Outcomes Assessment

Instrument did not accurately reflect student achievement. The assessment instrument for PC Hardware II has been revised and will be administered Winter quarter, February 2009. The assessment instrument for PCOS will be revised and will be administered Spring quarter, May 2009.

PC Tech Support (Technical Concentration)

The assessment instrument is also being revised to more accurately reflect student achievement and will be administered for the concentration area at the end of Spring quarter, May 2009. Faculty are also investigating assessing both the Server Management and Computer Interface courses, and providing students with additional time for the assessment activities.

Networking (General Technical)

The faculty has decided that it is redundant to collect data on both the Networking Essentials course and the Client/Server Networks course since the skills in the second course build on the first.

The assessment instrument is being revised to more accurately reflect student achievement and will be administered the Spring quarter, May 2009. In order to cover all necessary skills in both Networking Essentials and Client/Server Networks, the faculty will also investigate providing students with additional time for the assessment activities (all of the 10th week of the quarter).

Networking and Cyber Security (Technical Concentration)

The assessment instrument is being revised to more accurately reflect student achievement and will be administered Spring quarter, May 2009 in both the Server Management and Security course and the Firewalls and IDS course.

Web Development (General Technical)

The assessment instrument has been revised to more accurately reflect student achievement and will be administered at the end of Spring quarter, May 2009.

Web Development (Technical Concentration)

On reflection, it has been determined that since Web design is best communicated visually, a portfolio of student work in this concentration area would be most useful for assessment. As a result, it was decided that students will create portfolios in the course Advanced Web Development, the “capstone” course in the Web Development concentration. The portfolio will be assessed for students who have taken all four courses in the Web Concentration sequence.

Recommendations from Industry

We convened an industry advisory group in the Spring of 2007. The group consisted of computer professionals in a variety of positions from throughout the Rochester area. The purpose was to get feedback on our current curriculum and to gauge the industry trends to make sure our courses were staying current. We will add the recommendations of this group to our Outcome Assessment Performance Criteria/Benchmarks.

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