

**NTID**  
**Applied Computer Technology Outcomes Assessment**  
**Plan and Report for AY 2011-2012**

*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
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, <b>(80% of)</b> 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, <b>(80% of)</b> all students will be able to correctly perform at an average level of 2 or higher (meaning student can perform task(s) with no or minimal guidance) in every measureable category of a variety of functions including OS installation</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>	<p>a. For N=41, 34/41 or 83% of students preformed at an average level of 2 or higher in every measureable category.</p> <p>b. For a N=36, 13/36 or 37% of students performed at an average level 2 or higher in every measurable category.</p>	<p>a. We exceeded our goal, but we will continue to monitor performance in PC HW.</p> <p>b. Of the eight skill categories tested, three skill areas stood out that were most troublesome for students. 1) Installing and configuring Windows OS, 2) explaining common error messages and codes, and 3) identifying the names, locations, purposes and characteristics of operating system utilities. We will look carefully at these assessed</p>

			and configuration, application program installation and management, creation and management of directories and file structures, partitioning and preparation of storage media.				skills to determine action that needs to be taken to improve.
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, <b>(80% of)</b> 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 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.	a. For N=32, 22/32 or 69% of students performed at a level 2 or 3 on every measureable task.	a. The most common skill that was not achieved by students was related to file sharing; setting up file sharring, accessing it and adding a file. More attention will be given to skill development in this area.
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,	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, <b>(80% of)</b> all students will be able to create a Web site with given criteria	a. Fall 20051	a. Each quarter the 0805-252 course is offered starting in 20051	0805-252 is no longer being offered as a result of a curriculum change that decreased the web course offerings in our program.	N/A

	tables and style sheets.		using X(HTML).  This will be measured by attaining a 2 or 3 in each measurable category on the hands-on final.				
<b>Program Concentrations: Additional Technical Outcomes</b>							
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, <b>85% of</b> the students will be able to demonstrate that they can support the repair and maintenance of all computers and computer related peripherals.  This will be done by showing that students will attain a level of 2 or 3 on every measureable task.	a. Winter 20052 & Spring 20053	a. Each quarter the 0805-337 and 0805-350 courses are offered after Spring 20053	a. For N=15, 11/15 or 74% of students demonstrated the identified skills by attaining a level 2 or 3 on every measureable task.	a. Results were MUCH improved over the 2010-11 academic year. Two major changes were made to improve scores. 1) The hands-on assessment was part of the final grade, and 2) more emphasis was placed on properly preparing students in UNIX/Linux. The skill needing most improvement this year was in determining a domain name from a given IP address.
Networking and Cyber Security (Technical Concentration)	a. <i>Networking</i> : Students will be able to install, configure, administer and troubleshoot a	a. To occur through a hands-on final project at the end of the 0805-337 Server	a-b. Given a LAN/WAN environment, <b>85% of</b> the students will be able to demonstrate	a-b. Winter 20052 & Spring 20053	a-b. Each quarter the 0805-337 and 0805-338 courses are offered after Spring	a. For N=4, 4/4 or 100% of students demonstrated the identified skills by attaining a level	a. Results were MUCH improved over the 2010-11 academic year. Two

	<p>small LAN/WAN environment including servers.</p> <p>b. <i>CyberSecurity</i>: Students will be able to secure a LAN/WAN environment.</p>	<p>Management and Security course. b. To occur through project evaluation in the 0805-338 Firewall and IDS course.</p>	<p>they can install, configure, administer, secure and troubleshoot the network.</p> <p>This will be done by showing that students will attain a level of 2 or 3 on every measureable task</p>	20053	<p>2 or 3 on every measureable task.</p> <p>b. For N=5, 2/5 or 40% of students performed at a level 2 or 3 on every measurable task.</p>	<p>major changes were made to improve scores. 1) The hands-on assessment was part of the final grade, and 2) more emphasis was placed on properly preparing students in UNIX/Linux.</p> <p>b. With such a small N, interpretation of results is difficult, but not carefully reading instructions and not configuring routers correctly seemed to be the skill needing most improvement.</p>	
<p>Web Development and Database (Technical Concentration)</p>	<p>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.</p>	<p>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</p>	<p>Student work will be reviewed by the course instructor(s) using an assessment rubric which measures performance criteria.</p>	<p>AY 2007-08</p>	<p>At the end of each Spring quarter that Advanced Web Development is offered.</p>	<p>Advanced Web Development is no longer offered</p>	<p>N/A</p>

		assessed for students who have taken all four courses in the Web Concentration sequence.					
<b>Other:</b>	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.				This was done several years ago and as a result, the Advanced Web Development Concentration was discontinued.	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 program related questions in a ICS program student satisfaction survey instrument.	2005-2006	Annually	For N=15, 11/15 or 74% of students indicate they are satisfied or very satisfied on program related questions on the ICS program satisfaction survey.	Those that expressed dissatisfaction expressed that they felt they were not learning a lot from lectures as compared to a high percentage that learned a lot from labs.  Perhaps some department discussion can be done to see how lectures can be made more interactive or lively.
Job Placement	Graduates will be employed in the field.	NCE Placement Data	90% graduates will be employed in the field.		Annually	For AY 2010-2011 N=7; 89% of students in the Applied Computer Technology	We will continue to try to place our students and track the status of

						program who were seeking employment were working. An additional 8 students were continuing in school and the status of 2 students are currently unknown.	students that are currently unknown. We will continue to work with the employment office to help encourage our future students to find employment.
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 overall job performance rating by co-op supervisors was 4.00 (N=14) during the four quarters 2011-20114.	Although the goal of technical competency was exceeded, the mean ratings are not as high as in the previous year. We will monitor this coming year to see if there is a trend or if 2011-2012 is an aberration. Additionally, we will continue to monitor for the upcoming year including the department curriculum is kept up to date, ensuring currency in the discipline.
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	No Alumni Satisfaction Survey was scheduled for this year.	N/A
<b>Comments:</b>							

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