NTID

Applied Computer Technology Outcomes Assessment Plan and Report for AY 2012-2013

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		Performance Criteria/Benchmarks		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)	a. Building, Configuring and Maintaining a PC: students will be able to correctly diagnose faults, remove faulty items, install items, and restore to working condition a personal computer. b. Managing and Maintaining an Operating System: students will be able to install, configure, diagnose and maintain operating systems, drivers and application software.	*a. To be assessed through hands-on exam at the end of the 0805-217 PC Hardware II course.* *b. To be assessed through hands-on exam at the end of the 0805-215 PC Operating Systems course.*	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. 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 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 and configuration, application program installation and management, creation and management of directories and file structures, partitioning and preparation of storage media.	a. 20051 and 20052 b. 20052 and 20053	a. At the end of each quarter the 0805-217 course is offered starting in 20052. b.At the end of each quarter the 0805-215 course is offered starting in 20053.	a. For n=33 16/33 or 49% were able to perform at an average level 2 or higher in every measureable category. b. For n=15, 4/15 or 27% were able to perform at an average level 2 or higher in every measureable category.	a. Although none of the five categories (Repair, Diagnose, Configure, Assemble, Upgrade) measured were strong, students seemed to struggle most in the two categories; Configure and Upgrade. We will review the questions in these categories and to make sure we are adequately preparing students. b. Although the n was reasonably small, six out of eight categories showed poor results. (Configure, Repair, Create, Verify, Optimize, Restore). Instructors reported that because results were poor in the 2011-2012 assessment, the assessment was revised and required TOO much time for student to complete. Instructors will review the assessment again to assure it is reasonable to

							complete in the designated amount of time.
2. Networking (General Technical)	a. Network Security, Networking Essentials and Client/Server Networks: 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 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=16 4/16 or 25% were able to perform at a level 2 or higher on every measureable task.	a. All students were required to do four tasks in addition to five more randomly assigned tasks in three hours. Students generally did well on the four required tasks. Almost every student was <u>unable</u> to do <u>ALL</u> randomly assigned tasks at a level 2 or higher. Perhaps looking at an average score would be a better representation of their skill. We will review that.
3. Web Development (General Technical)	a. Web page Development: 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 attaining a 2 or 3 in each measurable category on the hands-on final.	a. Fall 20051	a. Each quarter the 0805-252 course is offered starting in 20051	Assessment of Web Development was discontinued in 2009.	N/A
Program Concentrations: Additional Technical Outcomes							
PC Tech Support (Technical Concentration)	a. Tech Support : 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 maintanence of all computers and computer related peripherals. This will be done by showing that	a. Winter 20052 & Spring 20053	a. Each quarter the 0805-337 and 0805-350 courses are offered after Spring 20053	a. For n=23, 17/23 for 74% attained a level 2 or higher on every emasureable task.	a. Although the assessment results did not meet the 85% goal, students did reasonably well on most questions. It seems that questions 12.1-12.4 showed the poorest results, so we will review those questions to see how we can enhance instruction in that area.

			students will attain a level of 2 or 3 on every measureable task.				
Networking and Cyber Security (Technical Concentration)	a. Networking: Students will be able to install, configure, administer and troubleshoot a small LAN/WAN environment incuding servers. b. CyberSecurity: 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 project evaluation in 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. This will be done by showing that students will attain a level of 2 or 3 on every measureable task	a-b. Winter 20052 & Spring 20053	a-b. Each quarter the 0805-337 and 0805-338 courses are offered after Spring 20053	a. For n=3, 0/3 or 0% attained a level 2 or higher on every measureable task. b. For n=3, 2/3 attained a level 2 or higher on every measureable task.	a. With an n so small, it is difficult to draw meaningful conclusions, but studetns clearly struggled with tasks related to questions 6.1-6.3, 7.1-7.3, and 12.1-12.4. We will review the tasks associated with those questions to see how we can enhance instruction in those areas. b. With such a small n, it is difficult to draw meaningful conclusions. We will review the assessment to see if it needs to be adjusted.
Web Development and Database (Technical Concentration)	a. Web Development: 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 instructors(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.	N/A - Assessment in this category was discontinued in 2009.	N/A
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.				N/A	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	2005-2006	Annually	For n=17, students were asked 13 questions concerning the ICS department. In 12 of the 13 questions, more than 80% expressed satisfaction. One question, "I am comfortable talking the the ICS Chairperson" the results were below 80 % satisfaction and this	This information will be shared with and reviewed by the ICS Chairperson to determine why some students might not be

			satisfaction survey instrument.			result was 78% satisfaction. (3/14 were not comfortable).	comfortable talking with her.
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=1; One graduate in the Applied Computer Technology program who was seeking employment was working. An additional 7 students were continuing in school at RIT; the status of 2 students was unknown and 2 students were inactive.	Seven students who graduated with AS and AAS degrees opted to continue their education at RIT pursuring BS degree. That is very good. Will do a follow up on inactive students with NTID Center on 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 4.18 (N=22) during the four quarters 20124-20133.	The number of students who successfully completed coop work experience doubled this past academic year. This meets the expectation of 80% students achieving an overall score of 3 or higher.
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	n/a	n/a
Comments:							