ASSESSMENT MATRIX

PROGRAM OR SCHOOL	M.S. in Information Science		
Assessment Coordinator for Program or School	**Name:** Paul Munro	**Email:** pmunro@sis.pitt.edu	**Phone:** 624-9427
Program or School Mission Statement	The Mission of the School of Information Sciences is to support and advance the broader education, research and service mission of the University by educating students, furthering knowledge and contributing our expertise to advance progress within an organization or across society in general through information.		
Program or School Goals	• **Theoretical Understanding**: Understand and employ the respective roles of people, information and technology in the development of information systems. • **Proficiency in Information-related skills**: Acquire proficiency in skills that span a broad range with a significant level of depth and understanding. Ideally the graduate's skill set should include the ability to analyze information system structure and performance, to design databases, and to manage software projects. • **Ability to apply theory and skills**: Experience project work both as individuals and in teams that demonstrates the ability to apply classroom knowledge in novel ways in real-world settings		

Learning Outcomes *What will students know and be able to do when they graduate?*	**Assessment Methods** *How will the outcome be measured? Who will be assessed, when, and how often?*	**Standards of Comparison** *How well should students be able to do on the assessment?*	**Interpretation of Results** *What do the data show?*	**Use of Results/Action Plan** *Who reviewed the finding? What changes were made after reviewing the results?*
1) Theory: Students will demonstrate fundamental knowledge of the abstract, theoretical principles of information science. These include, but are not limited to information theory, graph theory, statistical and/or probabilistic methods	Courses in this area will test the competency of students to perform specific calculations, to be determined by the faculty, for each of the content areas (eg entropy, matrix inversion, disjunctive normal form). Courses in this area will incorporate items into exams to be used as indicators for these specific competencies.	80% of the sampled projects or papers are expected to meet or exceed expectations in demonstrating a working knowledge of the formal constructs underlying information science.	About 1 in 4 students are lagging in the theory area (see attachment).	Faculty will examine the curriculum and the outcomes further to determine contributing factors and to identify approaches to improving student performance.

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2) Analysis: Students will evaluate the structure and analyze the performance of an existing information system with respect to technical capabilities and organizational requirements.	Two faculty members will examine a representative sample of student projects or case studies from the "Systems and Technology Area – General Systems and Technology" (e.g., INFSCI 2510 Information Systems Analysis) biannually using a faculty-developed rubric: 1. Exceeds expectations 2. Meets expectations 3. Does not meet expectations	80% of the sampled projects or case studies are expected to meet or exceed expectations in applying best practices in eliciting and interpreting system requirements and constructing UML-compliant models (class, state, and activity diagrams).	**To be measured in 2012-2013.**	
3) Design: Students will design information systems supporting functional and performance requirements that reflect an understanding of the cognitive information processing capabilities of humans.	Two faculty members will examine a representative sample of student projects from the "Cognitive Area – Cognitive Science and Systems" (e.g., INFSCI 2470 Interactive System Design) biannually using a faculty-developed rubric: 1. Exceeds expectations 2. Meets expectations 3. Does not meet expectations	80% of the sampled projects will employ best contemporary practices in interactive programming and usability engineering.	**Spring 2012:** 10 group projects from IS2470 were evaluated by 2 faculty members and a group of peers from the same class based on the written report, the project usability, and an oral presentation. 9 of the projects met or exceeded expectations on usability and oral presentations, and only 7 were above threshold on the written report.	Changes to be considered include more feedback on written report organization. This aspect of our program probably requires special attention especially since a large fraction of our students are international.
4) Working in teams: Students will experience professional engagement involving cooperative teamwork.	1. Every student is expected to participate in a team project involving as a project leader and as a non-leader. 2. A random sample of MSIS students in their last term will be interviewed by a faculty team. Students must be able to describe a project in which they led a team, and one in which they were *not* the leader.	1. At least 75% of the interviewed students will be able to describe problems they faced as team leaders and how the problems were addressed. 2. 90% of MSIS graduates will have completed a project involving a team and be able to explain their role in the project.	**To be initiated during the 2013-14 academic year.**	