

Subject: Program Student Learning Outcomes For Computer Information Systems
Last updated: January 27, 09 updated course matrix map with fall 09 status

General: There are 11 program student learning outcomes for Computer Information Systems Majors. These are listed under the major categories of Oral & Written Communication, Societal and Ethical Concerns, Theory & Research, an Analysis and Design.

Oral & Written Communication

1. Students will communicate effectively, both orally and in writing, and will have experience communicating to groups.
2. Students will work in teams as both a leader and participant.
3. Students will choose and produce appropriate artifacts of the analysis, design, and project management processes.

Societal and Ethical Concerns, "the profession"

4. Students will evaluate professional decisions based on an understanding of ethical issues, especially in terms of the ACM/IEEE computing professional code of ethics.
5. Students will understand the role of the computing sciences in business and society.

Theory & Research

6. Students will comprehend and articulate the fundamental concepts and theories of the discipline.
7. (Optional) Students will formulate a research question and investigate an answer by applying research methods appropriate to the field.

Analysis & Design

8. Students will properly select and use algorithms and data structures using appropriate programming languages.
9. Students will evaluate the impact of technologies on a business or other environment, and will plan for subsequent implementation / integration.
10. Students will properly select and apply appropriate hardware, software, database, and communications technologies and system architectures to solve business problems.
11. Students will analyze, design, and implement computer hardware and software systems based on best practices and standards, using appropriate life cycle methodologies and project management techniques.

Program Outcomes Mapping to CIS Course Matrix

Table 1 lists along the top row the courses that contribute to meeting a core or elective requirement for a BA or BS in Computer Information Systems. Column 1 lists the 11 program student learning outcomes. If a cell is not blank then that the course listed at the top of the column has learning outcomes that contribute to meeting the program student learning outcome for that row. A non blank cell will have either a date or an X. A date indicates the academic year that the course has been part of a formal program assessment against the associated program student learning outcome. An X indicates that the course has not yet been programmatically assessed against the program student learning outcome.

	CSC130	CIS211	CIS216	CIS245	CIS301	CIS310	CIS320	CIS325	CIS330	CIS345	CIS430	CIS450 & 465	MTH112	MTH116	MTH206
1		X	X	07-08	X	X	X	07-08	X	X	X	X			
2	X			X		X	08-09		X	X	08-09				
3		X			08-09	X	X	X	08-09	X	X				
4	X	06-07	X	06-07	06-07	X	X	X	X	06-07	06-07				
5		X				X	X			X	X				
6	X	X	X	07-08	X	X	X	07-08	X	X	X	X	X	X	X
7															
8	X		05-06					05-06	X		X				
9		X		X		X	X	X	X		X				
10		X			X		X	X	X	X	X				
11		X								X	X				

Table 1: Course matrix mapping of each CIS course to the program student learning outcomes that it contributes to meeting.

Program Outcome Assessment Plan

Table 2 shows the program student learning outcome plan that was established in 2005 to assess one or two learning outcomes per year until completion in AY 2010-2011. During AY 08-09, Program Learning Outcomes 2 and 3 are being assessed.

Academic Year of Assessment	Program Learning Outcomes Assessed
2005-2006	8
2006-2007	4
2007-2008	1 and 6
2008-2009	2 and 3
2009-2010	5 and 9
2010-2011	10 and 11

Table 2: Program learning outcomes assessment plan

Assessment Format

The course coordinator of the courses selected to be assessed against a program student learning objective must provide the assessment plan in a pre-course assessment document submitted at a formal department assessment before the semester and in a post course assessment document submitted at the formal department assessment after the semester. All assessment documents are kept by the department chair on the department's internal web site.