



Annual Program Review 2012-2013 - INSTRUCTIONAL REPORT

Division - Program

COMPUTER SCIENCE/INFORMATION SYSTEMS

Authorization

After the document is complete, it must be reviewed and submitted to the Program Review Committee by the Division Chair.

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1.0. Trend Analysis

For each program within the division, use the data provided to indicate trends (e.g., steady, increasing, decreasing, etc.) for each of the following measures.

Program	Academic Year	FTES Trend	FTEF Trend	WSCH / FTEF Trend	Full-Time % Trend	Fill Rate Trend	Success Rate Trend	Awards Trend
Comp & Info Science	2008-2009	294	17	537	45.9%	81.1%	68.6%	6
	2009-2010	305	19	523	39.5%	89.2%	72.4%	1
	2010-2011	298	20	471	46.2%	91.0%	69.9%	6
	2011-2012	289	21	446	52.1%	93.6%	73.0%	13
	% Change	-1.9%	+18.1%	-16.9%	+6.2%	+12.5%	+4.4%	+116.7%
Four-Year Trend	stable	increasing	decreasing	stable	increasing	stable	increasing	

1.1 Describe how these trends have affected student achievement and student learning:

For most of the columns, the percentage changes are relatively small compared to the size of the absolute numbers. The exception is the last column, where the absolute numbers are perhaps too small to be comparable. Since values fluctuate, sometimes up, sometimes down, for most measures, and since the time interval is short, it is difficult to discern a pronounced trend. By and large, the numbers indicate stability.

1.2 Please explain any other relevant quantitative/qualitative information that affects the evaluation of your program?

Two quantitative features are relevant: (1) the CS/IS Department offers a large number of distinct courses, 60 according to 2011-2012 catalog and according to records maintained by the division, although some are not offered on a regular basis; and (2) the CS/IS Department administers a relatively large number of distinct programs, sixteen as per item 2.3 below. A relevant qualitative fact is that all the CS/IS courses are collegiate in nature; that is to say, none are developmental.

2.0. Student Learning and Curriculum

Course Level

Year	SLOAC Course Count		% of Courses Assessed
2010-2011	31	77.4%	12.9%
2011-2012	31	90.3%	12.9%
% Change		+12.9%	+0.0%
Four-Year Trend		increasing	stable

Provide the following information on each department and program within the division.

List each program within the division	Active Courses with Identified SLOs		Active Courses Assessed		Course Sections Assessed	
	N / N	%	N / N	%	N / N	%
CSIS	42/60	70%	7/60	12%	50/80	62%

2.1 Please comment on the percentages above.

Numbers refer to all courses, instead merely "active" ones, since the characterization is difficult to apply to available data. Course sections specified on an annual, not semester, basis. Assessment cycles in process of conversion from four-year to three-year, and both course and program assessments will proceed on that basis.

2.2 Using the results from your division/departments recent assessment reports, please summarize any pedagogical or curricular changes that have been made as a result of your course assessments.

Offerings of both CS/IS 112 and CS/IS 135 will be increased by one section each for spring 2013 semester.

2.3 Please list all courses which have been reviewed in the last academic year.
Note: Curriculum Review is required by the Chancellors Office every 6 years.

CS/IS 100, 101, 112, 123, 124, 126, 135, 139, 255, 260.

Degree, Certificate, Program Level

List each degree and certificate, or other program* within the division	AA/AS Degree PLO Identified		AA/AS Degree Assessment Cycles Completed		Certificate PLO Identified		Certificate Assessment Cycles Completed	
	YES	NO	YES	NO	YES	NO	YES	NO
Computer Applications Specialist as	X			X				
Computer Applications Specialist Certificate					X			X

Computer Applications Technician Certificate					X			X
Computer Information Systems AS	X			X				
Computer Information Systems Certificate					X			X
Computer Operator Certificate					X			X
Computer Programmer AS	X			X				
Computer Programmer Certificate					X			X
Computer Science AS	X			X				
Computer Science Certificate					X			X
Computer Software Technician AS	X			X				
Computer Software Technician Certificate					X			X
Computer Support Technician Certificate					X			X
Computerized Accounting Specialist Cert.						X		X
Dental Front Office/Billing & Coding Cert						X		X
Desktop Publishing Technician Certificate						X		X
?								

2.4 Please comment on the percentages above.

Certificates and degree programs are currently under review with intent to delete obsolete items and combine redundant ones.

2.5 Using the results from your division/departments recent assessment reports, please summarize any changes that have been made as a result of your program level assessments. Your summary should include a summation of the results of all degrees, certificates, and other programs which were recently assessed.

The main recent and projected future effort is to develop the TMC in computer science and secure approval at the state level.

2.6 Please list all degree/certificate programs within the division that were reviewed in the last academic year.

Please sections 2.4 and 2.5 above for this.

2.7 What recent activities, dialogues, discussions, etc. have occurred to promote student learning or improved program/division processes in the last year?

Mark an "X" in front of all that apply.

X	Curricular development/revisions of courses
X	Curricular development/revision of programs
	Increased improved SLO/PLOs in a number of courses and programs
X	Other dialog focused on improvements in student learning

	Documented improvements in student earning
	Increased/improved SLO/PLOs in a number of courses and programs
X	New degree or certificate development
	Best Practices Workshops
X	Conference Attendance geared towards maintaining or improving student success
X	Division Retreat in 2011-2012
X	Division or department attendance at Staff Development activity geared towards maintaining or improving student learning
X	Division Meeting Minutes
	Reorganization

Please comment on the activities, dialogues, and discussions above

Most full-time faculty and many adjunct faculty have attended conferences and workshops. Efforts are focused on TMC in computer science (as mentioned in 2.5 above) and on regularizing SLO process for courses and programs.

3.0 Reflection and Action Plans

- 3.1 Based on your data and analysis presented above, as well as on issues or items that you were unable to discuss above, comment on the Strengths and Weaknesses of the Program

Strengths

List the current strengths of your program

1. Strong student demand both from departmental and from related major fields.
2. Faculty with competencies in a variety of specialties.
3. Articulation to universities and connections to industry generally exist.

3.2 Weaknesses

List the current weaknesses of your program

1. Inadequate and obsolete equipment.
2. Insufficient offerings, both of specialized classes and sections of general courses.
3. TMC for computer science not yet in place.

- 3.3** Using the weaknesses, trends and assessment outcomes as a basis for your comments, please briefly describe any future plans and/or modifications for program/division improvements. Any plans for reorganization should also be included, along with a resource request if applicable.

Plans or Modifications	Anticipated Changes/ Improvements	Link to EMP, Plans, SLOs, PLOs, ILOs
Implementation of TMC for computer science.	Better service for several hundred students with declared computer science and related majors.	Comparison of C-ID descriptors with GCC course outlines and SLOs shows that GCC has equivalents for all five approved C-ID CS courses, including the four which are part of the CS major. We are under mandate to proceed with both course and major approval. Reference: EMP 3.4.1(b)
Update of instructional modalities for CS/IS 101, particularly online aspects of course.	Increased student comprehension and interest.	Two SLO assessments have been done in CS/IS 101. Both indicated improvement over the course of the semester. Yet the absolute magnitude of results on the exit exam (about two-thirds correct on average) show that improvement is possible.
Continued development of computer gaming program; new development of robotics program.	Aligning program with both student interests and available employment.	Since the relevant courses are new, we lack direct data as yet. However, the most analogous SLO assessments currently available indicate enough students who could undertake this study Reference: EMP 2.1.3, 3.4.2.

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2012 PROGRAM REVIEW

Section 4 Resource Request

BUSINESS-CSIS	I:BUS.CS-1
<i>Classroom computer replacement</i>	

Mark Type of Request:

	Facilities/Maintenance	X	Computer Hardware for Student Use
	Classroom Upgrade		Computer hardware or Faculty Use
X	Instructional equipment		Software/Licenses/Maintenance/Agreements
	Non-Instructional Equipment		Conference/Travel
	Supplies		Other

4.1 Clearly describe the resource request.

The Business Division has 7 computer-equipped classrooms. All of the computers have been purchased with VTEA/Perkins funding. Each classroom computer costs about \$1,000 each. Most of the classrooms have 30 workstations and an instructor station. A plan to replace each classroom with new computers needs to be implemented. The historical life cycle for our workstations has been three years in the classroom and then three years in the lab. At the end of six years, the computers are in need of replacement and begin to cost more to maintain than to replace. The college needs to accept responsibility for the routine purchase of replacement computers by authorizing 31 computers to be replaced each semester. This will cost the college roughly \$35K per semester

Amount requested: \$ 70,000 per year

4.2 Funding

	Requires One Time Funding
X	Requires Ongoing Funding
X	Repeat Request
2011	Year(s) Requested

4.3 Please check if any off the following special criteria apply to this request:

	Health & Safety Issue
	Accreditation Requirement
	Contractual Requirement
	Legal Mandate

Please explain how/why this request meets any of the above criteria.

[Click here to enter text.](#)

4.4 Justification and Rationale: What EMP Goal, plan, SLO, PLO, or ILO does this request address? Please use information from your report to support your request.

All SLO, PLO and courses within the CSIS department rely on computer equipment to accomplish the learning objectives of the department. Equipment failures or malfunctioning software environments are catastrophic to learning objectives as all attention is diverted from course objectives to dealing with the problem. In this regard we refer to EMP 3.5.2(b). The capability to meet goals specified in that item for both on-campus and distance learning is compromised by equipment inadequacy, and could be reduced further in the near future. The SLO assessment results for CS/IS 101 (cited in 3.3 above) are some indication of these difficulties.

4.5 What measurable outcome will result from filling this resource request?

Increased numbers of students completing certificate and A.S. programs, included projects TMC in computer science. In some cases, fulfillment of request is necessary for continued existence of program.

APPROVAL

AGENCY	DECISION	
The Program Review Committee has reviewed the information in this request and finds it to be:	COMPLIANT	X
	NON COMPLIANT OR INCOMPLETE	
	a) Request not adequately described or incomplete	
	b) Request not linked to assessments or assessments not completed	
	c) Request not linked to EMP, plan or SLO,PLO or ILO	
	d) Report Incomplete	
PRC Comments		

Form Revised 9.19.12

Reports determined to be "Non-Compliant" will be returned to the division member responsible. Reports must be resubmitted with needed changes to the Program Review Office. Requests will not move forward in the budget process if the report or request is Non-Compliant.