

# Assessment Report 2011

Prepared by the Office of Instruction

#### Introduction

East Central College organizes its assessment activities through various offices, departments and committees, as indicated below.

This third edition of the East Central College Assessment Report, 2011, is the result of assessment planning, division and department planning and the establishment of a reporting mechanism and timeline. Reporting formats continue to be at the discretion of the departments and faculty.

Several features are noticeably different in this edition; first, less student population and trend data is published. Much of this information is available in the college Fact Book and readers wanting information about the student population can refer to that document, available on the website. Many different departments have submitted for this edition of the Assessment Report and others, such as English and mathematics, will continue to report annually. Reports included herein are for academic year 2010-11.

This edition features program reviews, annual updates, self studies and team reports from a variety of programs.

The Assessment Committee, in the previous two years, has worked to develop a Program Review process. This newly adopted process includes the review of a data template; many of these data templates are included in the section on program review. Throughout this academic year, the Assessment Committee solicited feedback on the program review process and made recommended modifications which will improve the scope and depth of the reviews.

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Fall 2011 Assessment Report

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Creative/Critical Thinking

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Nursing

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### Allied Health Programs Radiologic Technology

IX. Career Technical

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Accounting

Computer Information Systems

CS1163 Network 2

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Education

Early Childhood AAS

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#### **Assessment Planning and Reporting**

#### The Assessment Structure

The **Assessment Committee** is a standing committee chaired by the chief academic officer; the committee is responsible for review and oversight of institutional assessment plan and efforts; to make recommendations to division and/or programs; to maintain the institutional assessment plan and institutional effectiveness plan; communicate to divisions on matters related to assessment.

For the current academic year, the Assessment Committee established the following goals:

- Review and update of the program review process
- Development of non-instructional assessment plans and tools
- Completion of an institutional assessment plan
- An update of the department/division plans
- Development of a data inventory
- Create, for students, a brochure detailing information on student assessment and what it means

### Assessment and Planning Statement of Mission and Purpose

East Central College serves a diverse community of learners. It is the mission of the committee charged with Assessment to improve learning. As an ongoing and fluid process, the Assessment program will:

Ensure that learning expectations are clearly stated;
Assess what is important to the learner and institution;
Use assessment and effectiveness data efficiently and responsibly;
Be timely in its reporting;
Inform decision makers;
Be evaluated and evaluative;
Improve performance institutionally;
Be strategic and responsive.

The Institutional Research, Assessment & Planning Office (IRAP) facilitates the collection and interpretation of institutional and assessment data to support informed decision making at all levels of the institution for the purpose of improving the quality of programs and services at East Central College. The IRAP Office reports directly to the President.

#### **Academic Divisions and Departments**

Each academic unit of the college maintains an assessment plan. These plans, together with course syllabi, outline the broad learning objectives and detail the specific learning outcomes. Further, plans detail data gathering and reporting cycles.

Together with the division/departmental planning documents, these tools guide faculty and staff in curriculum design and modification, testing and other course decisions. Assessment plans and division/department planning documents are maintained on file in the Office of Instruction, the division chair and the campus assessment web page.

The **Assessment Plan** is maintained, modified and updated by the Assessment Committee. The Plan reflects the institutional goals in assessing student learning and other institutional purposes.

#### **Departmental/Academic Unit Assessment Plans**

Units of the college adopt and maintain assessment plans appropriate to their program of study, curriculum, academic discipline or function. Collectively, these assessment plans guide the efforts of faculty and staff in measuring student learning, analyzing effectiveness and improving college operations. Information regarding these assessment plans can be found on the college's website <a href="www.eastcentral.edu">www.eastcentral.edu</a> or on file in the appropriate division office. Plans are maintained and reviewed regularly.

In this document, some units are indicated as *Not Reporting*. Not all units will report each cycle. Some academic units, because of the volume of offerings and the nature of the sequence of courses (i.e. English and mathematics) will report annually on varying aspects of the course sequence, the program or learning support.

#### **Program Review**

Throughout the past two years, faculty and staff at ECC have carefully conducted program review on several transfer and career/technical areas. The results of the program reviews conducted in Fall 2011 are included in this document.

Those programs are:

Transfer Engineering Psychology/Sociology

CIS (Computer Information Systems)

Graphic Design/Multimedia

Health Science

Each program submitted a self study report and a follow up report by the review team chair. Documents on program review are under that heading in this Assessment Report.

#### **Program Accreditation**

East Central College maintains voluntary program accreditation in each of the following program areas:

Culinary Arts	American Culinary Federation (A	(CF)
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**Industrial Engineering Technology Program** Association of Technology,

Management and Applied Engineering

(ATMAE)

Precision Machining Program National Institution for Metalworking

Skills (NIMS)

Occupation Therapy Assistant (MHPC) Accrediting Council for

Occupational Therapy Education

(ACOTE)

Radiologic Technology (joint program)

Joint Review Commission for

Education in Radiologic Technology

(JRCERT)

**Respiratory Care (joint program)**Commission on the Accreditation of

Allied Health Education Programs

(CAAHEP)

The following programs are in the initial or near complete stage of seeking program accreditation:

**Health Information Management** American Health Information Management

Association (AHIMA)

Early Childhood Education National Association for the Education of Young

Children (NAEYC)

Music National Association of Schools of Music

(NASM)

Art National Association of Schools of Art and

Design (NASAD)

In addition, the following programs carry full approval and operate under the regulations of the agencies noted:

**Nursing** Missouri State Board of Nursing

**EMS/Paramedic** Missouri Bureau of Emergency Medical Services

**Education** Department of Elementary and Secondary

Education

## **Student Information**

Orientation Survey Information and Summary

#### **II. Student Information**

#### **Campus Orientation Survey Information**

ECC requires all new students participate in a session of Campus Orientation. The Campus Orientation requirement is part of the Foundation Seminar course. Students entering in the fall are given optional dates for attendance; these dates include daytime and evening choices. Students entering Rolla in the fall also have a choice of dates.

The Campus Orientation program includes the following:

- Welcomes and Introductions
- Student Activity Fair
- Discussion on materials provided
- Breakout Sessions
- Required session on student use of eCentral, student email and Moodle
- Required session for A+ students
- Optional sessions on financial aid, success tips, working with an advisor, etc.
- Self guided tour or guided tour (added this year)
- Survey

In the Fall of 2011 and Spring of 2012, ECC once provided a quality, well received campus orientation experience to new students.

Faculty and staff are actively involved in the various activities and events; each iteration of orientation is thoughtfully planned using feedback from recent orientations. Planning starts well before planned orientations and involved faculty and staff from many different departments on campus.

The following is a summary of the student surveys completed at each orientation event in AY 2011.

#### **Response Rates**

Fall 2010

Pretest-599/1009

Posttest-240/964

Spring 2011

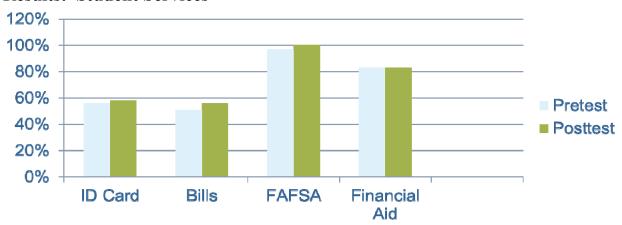
Pretest—233/427

Posttest—107/416

#### **Pre/Post Questions included:**

- Campus Services (where do you go to)
- Technology-Moodle/eCentral
- Stress/Time Management
- Academic Honesty
- Library
- Post-Test only:
  - Was this course helpful
  - Describe this course to others
  - Name three skills

#### **Results: Student Services**



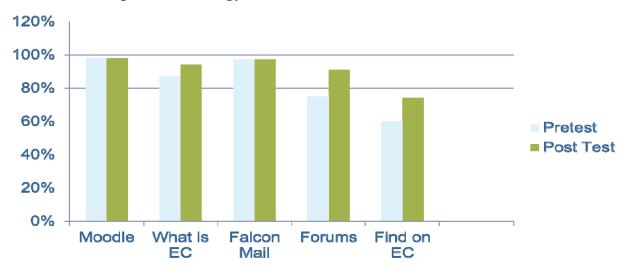
#### **Comparison-Student Services**

Fall 2010			
	Pretest	Posttest	
ID Card		54%	56%
Bills		48%	57%
FAFSA		99%	100%
Financial Aid		85%	88%
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#### Spring 2011

	Pretest	Posttest	
ID Card		56%	58%
Bills		51%	56%
FAFSA		97%	100%
Financial Aid		83%	83%

#### **Results: Campus Technology**



#### Comparison: Campus Technology

Fall 2010

	Pretest	Post Te	est
Moodle		99%	100%
What is EC		91%	95%
Falcon Mail		96%	98%
Forums		78%	90%
Find on EC		62%	75%

Spring 2011

	Pretest	Post Tes	t
Moodle		98%	98%
What is EC		87%	94%
Falcon Mail		97%	97%
Forums		75%	91%
Find on EC		60%	74%

#### **Results: Student Life**



#### **Comparison: Student Life**

Fall 2010

	Pretest	Posttest	
Time Mgt		87%	88%
Cheating		87%	94%
Degree		39%	44%
Library		57%	78%

Spring 2011

	Pretest	Posttes	t
Time Mgt		89%	93%
Cheating		95%	96%
Degree		38%	48%
Library		58%	73%

#### **Qualitative Question 1**

#### Three ways to deal with stress

#### Pretest

- "Suck it up"
- Talk about it
- Take a break
- Exercise

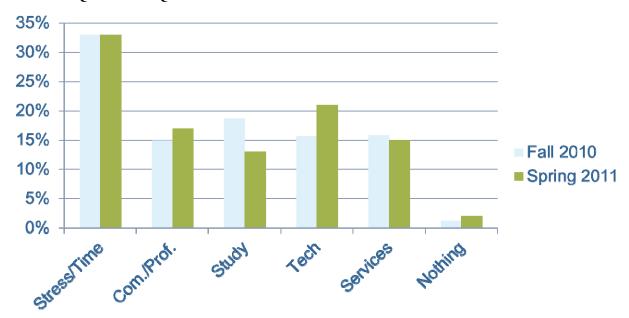
#### Post-test

- Time management
- Ask for help from resources

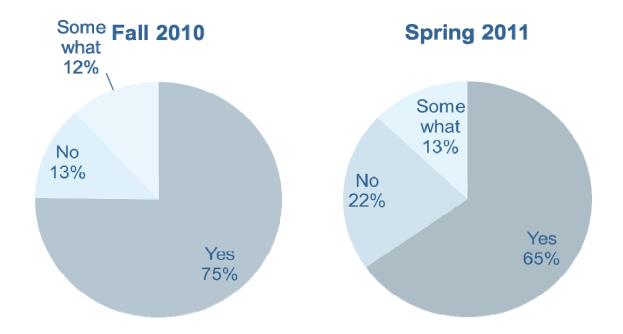
#### Overall

- Responses more constructive on pre and post test than Fall semester
- Students cite "time management" techniques more than in the pre-test

#### **Post-test Qualitative Questions**



#### Post Test-Qualitative-Course Worthwhile



Fall- Total of 254 Responses/Spring 2011-109

#### **Action Plan**

- Reworking pre/post test for accuracy and ease of use
- Reworking Technology assignment
- Focus group (looking for a cohort of 50 students)

#### **Use of Survey Results in Improving Campus Orientation**

The campus orientation program has adopted the use of a Moodle survey tool to expedite the feedback from orientation. The survey has demonstrated a high favorable evaluation of campus orientation.

The list below are some of the improvements integrated into orientation for AY 2012 based on feedback from participants over the past two cycles of orientation:

- Changes in the snacks/food provided to the new students
- Inclusion of a required session on eCentral; all students gain access using their assigned pin/password information while on campus
- A narrowed set of options for the breakout
- A guided tour
- Activities for students prior to the start of the formal orientation
- A student panel with the opportunity to take questions from participants
- Options intended for non traditional students and returning learners
- Options for nontraditional students on specific funding programs and services
- A series of Welcome Week events

Some additional improvement items to be implemented:

- More information for students receiving financial aid
- Additional daytime offerings in the orientation events

The survey tool, which all students complete as a requirement of the orientation program, has been very useful in shaping the activity. Today's orientation program is a highly evolved version of the original event and has improved at the suggestion of students, staff and faculty. The college will continue to explore improvement options and use student feedback to guide those improvements.

# The Common Learning Objectives

The CLO's

Status

Reports

Communication

Creative/Critical Thinking

#### **The Common Learning Objectives**

East Central College is nearing completion of the third full year of an AQIP Action Project focused on the adoption of, assessment of and integration of the Common Learning Objectives.

Assessment of the CLO Creative/Critical Thinking was the focus of many of this year's activities; in addition, others are in the beginning stages of examining assessment tools and options for Ethics and Social Responsibility.

By Spring 2011, the communication assessment tool was in use. See report on page

A majority of the faculty adopted the following revised set of Common Learning Objectives in the fall of 2009.

1. Ethics and Social Responsibility	
Related Themes:      Global citizenry     Professional ethics     Service learning activities     Extra and co curricular student activities     Student government activities     Ethical use of digital material and media	Constitution competency     Incidents of academic dishonesty     Incidents of unethical student conduct     Participation in service learning     Global and multicultural learning objective measures     Participation in student co curricular activities
2. Communication  Related Themes:      Listening     Writing     Speaking     Use of technology to communicate     Graphic and visual communications     Collaborative and group work     Co curricular communication activities	Measures      Writing skills assessments     Speaking skills assessment     Assessments of graphic and visual materials     Participation in presentations using technology     Student participation in student newspaper and other related activities
3. Creative/Critical Thinking Related Themes:      Problem solving skills     Use of and application of research tools     Demonstration of critique and evaluative skills     Application of observation skills     Originality of thought     Innovation and creation     Analysis and synthesis	Measures      Critical thinking skills assessments     Assessment of projects requiring primary research skills     Student participation in critique activities     Application of technology to research skills

#### The CLO Assessment

The Assessment Committee developed and adopted the following plan to assess the CLO's across the institution:

The Common Learning Objectives							
Assessing the Common Learning Objectives: Communication, Creative/Critical Thinking, Ethics and Social Responsibility							
Faculty teaching General Education courses	Faculty teaching in Programs	Students enrolled at ECC					
Process for General Education Faculty:  Designation of course(s) to be assessed by the division chair (annually)  Designation of general education courses associated with each of the CLO's  Assessment tool identified (the Assessment Committee)  Training throughout the year (cyclical)  Course learning objectives identified, denoted in course syllabi  Assessment data submitted at academic year end	Process for Program (AAS, Certificate) Faculty:  Designation of course(s) specific to the program to be assessed by the program faculty/division chair (annually)  Designation of courses within the program associated with each CLO Rotation of assessment of each CLO is identified  Assessment tool identified (the Assessment Committee)  Training throughout the year (cyclical)  Course learning objectives identified, denoted in course syllabi  Assessment data submitted at academic year end	Process:  Awareness of CLO course designation for general education and program specific courses  Participation in embedded or external assessments, as articulated in the course syllabus					
Measures:	Measures:	Measures:					
Student learning, as compared to baseline or national norms, based on tool used  Weighing of CLO importance in the class	Student learning, as compared to baseline or national norms, based on tool used  Weighing of CLO importance in the class	% of students completing as assessment					
Numbers of students assessed for each CLO, sampling	Numbers of students assessed for each CLO, sampling						
Results:	Results:	Results:					
Faculty reports by CLO are compiled; by discipline, by division, aggregate data  Data disseminated to divisions,	Faculty reports by CLO are compiled; by discipline, by division, aggregate data  Data disseminated to divisions,						
departments Improvement strategies developed	departments Improvement strategies developed						
Data incorporated as part of program review	Data incorporated as part of program review						

	CLO Assessment: Communication Report 11SP								
Form #	Division	Department	# Items Assessed	Class Average	Structure	Content	Presentation	Importance Level	Completion Week
3	ED/SOC/BUS	History	13	7.1	2.5	2.1	2.4	3	13
	ED/SOC/BUS	CIS	20	8.3	2.8	2.6	2.9		
	ED/SOC/BUS	Business Cap	7	6.6	2.2	2.2	2.2	3	
	ED/SOC/BUS	History	20	5.55	1.85	2	1.8		
	ED/SOC/BUS	History	10	8	2.9	2.5	2.5	3	
	ED/SOC/BUS	History	29	6.4	2.2	2.3	1.9		
	ED/SOC/BUS	Business/Intro to Bus.	36	7.12	2.42	2.32	2.38		
	ED/SOC/BUS	Bus. Tech/Bus.Comm. Psych./Human Dev.	21 37	6.8 7.2	2.5 2.6	2.5 2.5	1.8 2.1	3	
	ED/SOC/BUS ED/SOC/BUS	Child Developme	22	7.2	2.6	2.5	2.1		
	ED/SOC/BUS	Teaching Prof.	15	7.3 8.6		2.73	2.3		
36	ED/SOC/BUS	Ed. Psychology	36	8.5	2.87	2.73	2.7	3	
- 50	22,000,200	Larrayanalogy	266	0.5		2.5			10
				7.29	2.53	2.4	2.35	3.17	13.8
4	ENFLP	English	13	6.67	2.58	2.25	1.75	4	
	ENFLP	English	15	6.8	2.4	2.3	1.8		
	ENFLP	Civ/Asian Civ	21	6.95	2.38	2.23	2.2	3	
	ENFLP	Fiction	21	6.09	2.09	1.76	2.23	4	
	ENFLP	English	7	6.14	2.14	2.14	1.9	3	16
17	ENFLP	Journalism	4	6.5	2.25	2	2.25	4	15
18	ENFLP	Lit of Sci Fi	18	8	2.9	2.5	2.6	4	16
19	ENFLP	Bus.Writing	7	6.6	2.6	2.1	1.9	4	17
37	ENFLP	Reading	11	6.9	2.5	2.2	2.2	4	14
			117						
				6.74	2.43	2.16	2.09	3.78	13.9
	FPA	Art-Sec. 14	22	5.81	1.95	2.09	1.77	3	
	FPA	Art-Sec. 13	22	6.01	2.05	2.14	1.82	3	
12	FPA	Music	48	5.8	1.9	2	1.9		
	FPA	Ceramics I	13	5.4	1.9	1.6	1.9		
	FPA	Gallery Application	6	5.7	1.5	2.2	2	3	
	FPA	Art Appreciation	24	6.2	2.27	1.99	2	3	
24	FPA	Drawing II	8	7.25	2.4	2.2	2.5		
25 26	FPA FPA	Drawing I	24 15	5.97 7.3	2.02	2.04 2.5	2.3	3	
27	FPA	Design I Theatre/Comm.	18	6.5	2.3	2.3	2.3	4	
38	VOID-Duplicate	meatre/comm.	10	0.5		2.2	2.3	4	10
39	FPA	Graphic D./Multi-	8	8.4	7.3	7.1	7.1	3	16
	FPA	Oral Communica.	11	6	2	2	2	4	
		oral communication	219		_	_	_		10
				6.36	2.47	2.51	2.47	3.08	14.7
		_		_			_		_
#	Div.	Dept.	Items	Avg.	Struc.	Cont.	Pres.	Imp.L	Comp
	NRALL	Nursing	20	8.6		3	3	3	
	NRALL NRALL	Nursing Allied Health	8	8.5 8.8		3	2.63 2.8		12 16
	NRALL NRALL	Nursing	21 8	8.8 8.64		2	2.8		
	NRALL	EMS	9	6.77		2.22	2.22		
20		25	66	0.77	2.33	2.22	2.22	1	9
				8.26	2.82	2.64	2.71	2.6	12.8
20	CTECH	Ind. Engineer.	12	6.1	1.8	2.8			
		-	12						
				6.1	1.8	2.8	1.5	3	14
Comparison by Division									
			Items	Avg.	Struc.	Cont.	Pres.	lmp.L	Comp
			266	7.29	2.53	2.4	2.35	3.17	13.8
			117	6.74	2.43	2.16	2.09	3.78	13.9
			219	6.36	2.47	2.51	2.47	3.08	14.7
			66	8.26	2.81	2.64	2.71	2.6	12.8
			12	6.1	1.8	2.8	1.5	3	14
			680	6.95	2.41	2.5	2.22	3.13	13.8

## CLO Assessment: Communication Report COMMENTS ON RESULTS

#### (SUBMITTED BY FACULTY WITH RESULTS)

Spring, 2011

STRUCTURE	CONTENT	PRESENTATION		
Proficient or mastered which is to be expected since the students have completed Comp. I & II prior to entry in the program.	Proficient to average. Students continue to have difficulty with APA formatting even though they have a multitude of resources.	Mastered, the students tend to have a vested interest in their topic of choice. They have developed skills to teach in the healthcare setting and assess the needs of the community.		
2. Proficient or mastered which is to be expected since the students have completed Comp I & II prior to entry in the program.	Proficient to average. Students continue to have difficulty with APA so this is an area that is more difficult for the students.	Mastered, the students tend to have a vested interest in their topic of choice. They have developed skills to teach in the healthcare setting and assess the needs of the community.		
Fairly good by this point in the semester, although some still struggle with organization and transitions.	Keeps improving, but average; students still tend to reiterate rather than analyze information from sources. aspects to be less polished when item	Overall, adequate, although many students still struggle with proofreading, technical errors, style, etc.		

- 4. It is not uncommon for mechanical aspects to be less polished when items are more complex. As a general rule, these essays offered freshness of thought.
- 5. Presentation was surprisingly low for this assignment although essential to this specific assignment.
- 6 None
- 7. Presentation-MLA errors, spelling and grammatical mistakes
- 8. Presentation-MLA errors, spelling and grammatical mistakes
- 9. The ACI students in the ADN Nursing Program were able to identify teaching needs of assigned adults; children based on individual topics chosen. The ACI students need more presentation skill practice time which occurs in AC II and AC III.
- 10. I took a quick poll at the beginning of the semester to find out how many students in the class had already taken Comp II where they should have been doing literary analysis. The majority of students had already completed Comp II (all had at least completed Comp I), which isn't always the case for the 1000 level lit classes. The higher scores in Structure and Presentation probably have a lot to do with their having been through 2 semesters of Comp. The lower content scores isn't that much a shocker since I believe we are waiting too long in the Comp sequence to introduce textual analysis, and the way we cover literary analysis in Comp II isn't sufficient (my own instruction included). For this kind of written communication in the English department, I believe we have to serve students better in Comp I and II with more analytical work, and also maybe make Comp II a pre or co-req for all lit classes. If we expect them to do literary analysis as a main component of literature classes, we're not setting students up for success if we don't make Comp II a precursor. This was the second literary analysis they did in class, this one specifically a character analysis. Even though the content was still on the low-ish side, it was, in general more advanced and mature than the first paper.
- I found the rubric a bit restrictive in that it was on a 3 point scale. There wasn't enough nuance or graduation for my liking. I think if it had been on a 5 or 6 point scale, with a little more subtle distinctions between the points, the scored in content would have been higher. If felt between Emerging and Proficient, there was a lot of room possible. And only a couple students got Mastery.

STRUCTURE	CONTENT	PRESENTATION
11. Some students still have	Very good. The majority of	Good. There were some excellent
difficulty following basic	students are ready for their Skills	examples of proper documentation.
instructions.	Final and should do very well.	
	idents did not understand required leng	
13. Well defined per plan	Completion of 3 year strategic plan	Performance of plan.
instructions.	per instructions	
14. None	To the second	Two areas areas
15. Proficient or mastered which is	Proficient to average. Students	Mastered, the students tend to have
to be expected since the students	continue to have difficulty with	a vested interest in their topic of
have completed Comp I & II prior	APA formatting even though they have a multitude of resources. We	choice. They have developed skills
to entry in the program.		to teach in the healthcare setting and assess the needs of the
	do not have a lot of opportunities for the students to complete major	community.
	assignments in APA so this is an	community.
	area that is more difficult for the	
	students.	
16. The presentation was probably to	ower since this is a literature course an	d we don't focus on grammar/MLA
	nanged). Students are typically more e	
literary analysis, so the scores reflec		
	s improved from their earlier assignme	ents, and learned to revise their own
	nt needs improvement (working with s	
18. Final essay-results were expect	ed. Strong structure and presentation	(MLA) weak on focus and content.
19. Good, expected at this point in	Average. In-class final exam on	Almost average, citation errors are
semester.	last day of finals. Four students	key factors in lower scores.
	graduated last week, so minds may	5
	already be checked out.	
20. Understood basic project but	Project complete on time and in	Specification sheets weak and lack
lacking details.	safe manner.	organization.
	understanding of the project and comp	
	veloping an electrical specification. T	
A COMPANY OF THE PROPERTY OF T	the outcome was satisfactory but we m	iust work on the details and
specification areas.	e of Art Terminology must be presente	ad anarrand rainforced throughout
	to the first of the work was satisfactory. S	
generally adequate.	videas of the work was satisfactory. S	n octare and prescritation were
22. Transitions between points	Strong because students were	Most met time requirement, used
need to be improved.	knowledgeable about the content.	audience appropriate language, eye
nood to be maproved.	Need to work on explaining ideas	contact and body language can be
	or processes more fully and work	improved with more practice.
	on Art Historical Themes.	PRODUCTION OF STATE O
23. None	Content area always seems to be	Using research and fonts-
	the weakest-mostly evidence and	presentation was a close second.
	support.	Sources not cited correctly and
		move proofreading needs to take
		place.
24. High overall—a few bring it	Comes into play with students	High overall—a few bring it down.
down.	critiquing other's work. Next	and the second s
	semester we will re-give lesson on	
	how to properly crit and what	
	forms a good crit. Remember how	
	to support your thoughts-plan	
	ahead-too many trying to "wing it".	

STRUCTURE	CONTENT	PRESENTATION		
NE AND	are still finding their way using vocab	The respective designation of the second		
sensible reasoning, but not yet persuasive—they are grasping issues. But still shy about speaking aloud.				
	owever, once I looked back at the num			
student's strengths and weaknesses.	,	,		
	ne most improvement. The 2 <sup>nd</sup> speech	in the class is usually the weakest-		
	e they've done well in the 1st speech.			
	a 2nd rehearsal day for the speeches.			
28. None				
29. Am pleased, pre-writing	One example of reactive opinion	Almost all met the minimal		
outlining had been purpose of	balanced by two examples of	requirements of form re: margins,		
previous short assignments	closely-related content mainly	typography, etc.		
harvan mar zeronam	lifted from a source. Balance were	Shorterly, ever		
	reflective-thinking as per the			
	assignment.			
30. Students are reminded of the	Students quoted from the readings	Students understand that spelling,		
elements of a basic essay	and cited those and any additional	grammar and usage errors will cost		
throughout the semester and most	sources used. Grade on this	them points. Factual errors hurt the		
understand what is expected at this	assignment is primarily based on	most.		
point in the semester.	content.	11031.		
	too heavily on copying and paraphrasi	ng materials found on websites		
	f original thought/opinion. There is so			
understand how to synthesize informa		one concern mai stagents ran to		
	semester long project, it was apparent	that many students waited until the		
	assignment. This was reflected in the			
32. Good, students received	Good, students received scoring	Average, some students have had		
scoring guide with requirements.	guide with minimum requirements.	more practice with public speaking		
scoring gaine with requirements.	golde with himmingh requirements.	and have had more practices in		
		other classes.		
33. Good	Students research is supported	Weak, APA errors, citations are		
33. 0004	broading research supported	weak		
34. This course has no prerequisite f	or writing and is taken hy a variety of			
34. This course has no prerequisite for writing and is taken by a variety of majors and levels of students. Since content is lowest, perhaps additional examples or expectations could be shared with the class.				
35. None	Content a little lower—mainly due	Presentation excellent!		
33. 11010	to limited examples on some.	Trobothanor oncomons.		
36. Because this course is at the end	of the program, most students have m	astered their communication, skills		
by the time they are taking Educational Psychology. The student performances meet the expectations of the				
educational department.				
37. Understanding the building of the foundation of the ten basic techniques of comprehending an author' or				
speaker's point and support can be assessed with the act of summarizing. The general structure should be strong				
as recognizing the physical or superficial appearance. Formalizing reading and writing higher-order cognitive				
processes and shaping into an effective and presentable effort requires practice, consistent and continued				
exposure and exchanging of authors' and speakers' arguments to acquire the habit of reading, writing, thinking				
and questioning at the higher-levels, resulting in this evidence of a beginning cognitive activity's results being				
in that expected level of early-learning effort and range of results.				
38. Structure is the area that needs the most improvement. The 2 <sup>nd</sup> speech in the class is usually the weakest-				
students get overly confident because they've done well in the 1st speech. I need to really emphasize the				
rehearsal aspect-maybe even consider a 2 <sup>nd</sup> rehearsal day for the speeches.				
39. It seems odd that the overall average would be 84% when each area is in the low 70% sections				
40. This was a difficult class for students. The hybrid nature of the course added to overall performance issues.				
Also, the Debate rubric I use needs to be amended to more specifically measure these areas. It's Difficult to				
assess group work with this rubric without some additional work on my part, which I will do next term.				
assess group work with this roome without some administrative work on my part, which I will do next term.				

## CLO ASSESSMENT: COMMUNICATION REPORT COURSE LEARNING OBJECTIVES

#### (SAMPLES OF LEARNING OBJECTIVES FROM FACULTY SYLLABI)

- 1. Program Objectives—Establish and maintain positive interpersonal relationships with clients, families, and other members of the health team. This includes:
  - 1. Utilizing knowledge of verbal and non-verbal communication in the nursing process.
  - 2. Utilizing proper lines of authority in communicating with co-workers.
  - 3. Recording and reporting relevant data accurately as it becomes apparent.
  - 4. Evaluating effectiveness of one's own communication with clients, coworkers and others.

Function as a teacher of clients who need information or support to maintain health. This includes:

- a. Utilizing basic teaching-learning principles.
- b. Utilizing nursing process as a basis for establishing and evaluating teaching-learning plans.

#### Course Objectives—

- 5. Prepare & revised individualized teaching plans in accordance with patient's needs.
- 6. Develop a comprehensive care plan directed towards short and long-term goals based upon identified patient needs.
- 7. Prioritize and implement the plan of care according to patient's needs and developmental level.
- 2. Program Objectives—Establish and maintain positive interpersonal relationships with clients, families, and other members of the health team. This includes:
  - 8. Utilizing knowledge of verbal and non-verbal communication in the nursing process.
  - 9. Utilizing proper lines of authority in communicating with co-workers.
  - 10. Recording and reporting relevant data accurately as it becomes apparent.
  - 11. Evaluating effectiveness of one's own communication with clients, coworkers and others.

Function as a teacher of clients who need information or support to maintain health. This includes:

- c. Utilizing basic teaching-learning principles.
- d. Utilizing nursing process as a basis for establishing and evaluating teaching-learning plans.

#### Course Objectives—

- 12. Prepare & revised individualized teaching plans in accordance with patient's needs.
- 13. Develop a comprehensive care plan directed towards short and long-term goals based upon identified patient needs.
- 14. Prioritize and implement the plan of care according to patient's needs and developmental level.

3. From syllabus goal 4 ". . . gain and improve basic skills in writing and critical thinking . . ." and Writing competency 1 "Read, analyze and respond to material critically and appropriately."

- 4. Understand fantasy as a venue wherein writers grapple with complex social, political and/or moral abstractions.
- 5. Be able to utilize the fundamental principles and theories of technical writing to write, cite and illustrate technical documents such as technical description and instructions.
- 6. Compare and contrast culturally and historically diverse perspectives and belief systems.
- 7. Analyze artists' compositions using vocabulary of the principles and elements of design. Collect and synthesize information on artists' lives and work, and summarize in written context, using professional standards when citing sources.
- 8. Analyze artists' compositions using vocabulary of the principles and elements of design. Collect and synthesize information on artists' lives and work, and summarize in written context, using professional standards when citing sources.
- 9. Identify teaching needs of assigned adults or children; demonstrate a beginning ability to perform patient teaching utilizing appropriate teaching-learning principles.
- 10. Develop reasonable interpretations, draw informed conclusions, and produce accurate analysis; develop topics fully, drawing examples and details from the class texts.
- 11. Identify the characteristics of distance vector routing and link-state routing protocols. Design and implement a classless IP addressing scheme for a given network.
- 12. The objectives are to broaden knowledge and perspectives of music, to enhance the understanding of the basic elements of music.
- 13. Prepare 3 year strategic plan for simulation company.
- 14. Students will demonstrate the ability to write effectively by making written presentations employing appropriate syntax, language and usage.
- 15. Course Objectives--2) Determine actual and potential patient needs based on subjective statements and objective assessment findings. 12) Employ therapeutic communication skills when providing nursing care for a patient with a knowledge deficit. 14) Determine essential elements of the patient's teaching needs to be documented according to legal protocol and to be professionally communicated to appropriate health care team members. Program Objectives—C. Establish and maintain positive interpersonal relationships with clients, families, and other members of the health team. This includes: 1. Utilizing knowledge of verbal and non-verbal communication in the nursing process. 2. Utilizing proper lines of authority in communication with co-workers. 3. Recording and reporting relevant data accurately as it becomes apparent. 4. Evaluating effectiveness of one's own communication with clients, co-workers and others.

D. Function as a teacher of clients who need information or support to maintain health. This includes: 1. Utilizing basic teaching-learning principles. 2. Utilizing nursing process as a basis for establishing and evaluating teaching-learning plans.

- 16. Write analytically about Shakespeare's texts and some film adaptations.
- 17. Students will write for the student newspaper (a variety of articles).
- 18. Develop writing and research skills
- 19. From syllabus—Objective 2: Write effective and concise letters and memos
  Objective 4: Proofread and edit copies of business correspondence
- 20. Objective B sizing and installation of feeder bus plus class project wiring
- 21. Communicating the visual elements, principles of design, idea development/symbolism of the Ceramics project.
- 22. Communication of ideas, media, or processes of student's own body of work, as well as use of Art Terms (Industry Vocabulary) and reference to Art Historical Themes
- 23. Analyze artists' compositions using vocab of the principles and elements of design. Collect and synthesize info on artists' lives and work. And summarize in written context, using professional standards when citing sources.
- 24. Convey art in vocab of principles and elements of design implementation of personal reunogs-ply, utilization of information from historic, contemporary resources-distilling information and analysis of intent and those of colleagues.
- 25. Student applies (in visual compositions) and is converse art in the vocabulary of the principles and elements of design and the analysis of their colleagues' efforts.
- 26. Communication of elements and principles of design in a final artwork presented to the class.
- 27. Objective 3-Students will prepare and deliver public speeches designed to inform their audience.
- 28 None
- 29. I do not have a writing assignment(s) for the purpose of teaching writing, and therefore do not have them stated in my syllabus as such. Each writing assignment is presented stating expectations concerning the assigned goal(s), clarity, and formatting requirements (re: margins, typography, etc.) of that particular assignment.
- 30. Communication—specifically writing. Reading for content and analysis of original source material also stressed.
- 31. Intro to Business is designed to give the student a general knowledge of the modern business world and a better basis for choosing concentrated business offerings.

32. From syllabus objective 6—Develop interpersonal skills that contribute to effective and satisfying personal, social, and professional relationships. Objective 7—Utilize electronic presentation

- 33. Write and speak effectively by making formal written and oral presentations employing correct diction, syntax, usage, grammar and mechanics.
- 34. 1) List the physical, cognitive, language, social & emotional development of the preschool -aged child. 2) Establish a plan to develop adult-child relationships.
- 35. List cognitive behavioral and affective characteristics of an effective teacher.
- 36. Identify aspects of classroom environment conducive to learning (MoSTEP 1.2.6) (ED 2,3,5,7,9) (ECC-CLO 1, 2, 3)
- 37. Improve and increase textbook reading comprehension levels and skills based on Bloom's Taxonomy by focusing on practicing the sub skills of reading comprehension for 80% or higher success rate. Recognition and application of personal metacognition. This course utilizes integrated textbook and computer assignments from the same publisher that supplement each other and continue to practice and apply the integration of the reading comprehension and basic writing processes in formal academic and occupational coursework assignments. Additionally, licensed and online software programs are assigned to blend and transition the processes and integration of the formal steps in reading comprehension and writing assignments.
- 38. Objective 3: Students will prepare and deliver public speeches designed to inform their audience.
- 39. To use all they have learned in the respective programs of study (Graphic Design/Multimedia) to work together as a group on a large single project.
- 40. Learn effective means of verbal expression in a variety of situations. Learn how to interpret nonverbal signals and use appropriate nonverbal behavior in a variety of settings, Learn about the nature of groups and how to work effectively with others.

## CLO ASSESSMENT: COMMUNICATION REPORT EMBEDDED ASSIGNMENT ASSESSED

#### (COMMENTS SECTION FROM FACULTY SUBMITTING REPORTS)

- 1. 8-10 page Community Teaching Project that entailed windshield of their community, research of the data, development and implementation of a medical related teaching plan based on the community needs, resources available, and learners developmental level, etc.
- 2. 8-10 page Community Teaching Project that entailed a survey of their community, research of the data, development and implementation of a medical related teaching plan based on the community needs, resources available, and learners developmental level, etc. The students completed their assignment by teaching to their respective community.
- 3. 2 or more page article or book review over a student-selected article dealing with a topic from Unit 3. Students analyze/review the selected article or review for its argument, support, evidence, sources, overall effectiveness, etc. in addition to providing a brief summary of the work's content. Focus is on analysis and evaluation of the work.
- 4. Students were asked to explain the symbolism of dust and demons in Philip Pullman's *The Golden Compass*. The assignment was a 3 page paper, supplying close reading of the text.
- 5. Create user-friendly set of two memos with the purpose of the audience being able to accomplish, a work-related task after reading them. One memo included descriptions of tools, items needed, etc. The second memo gave step-by-step instructions.
- 6. 10-15 minute presentation on Chinese history in the pre-modern period. Topics: Culture; society; economic development; arts & literature; conquest; assimilation of other cultures; religion & philosophy.
- 7. 3-5 page Research Paper: Compare and Contrast two artists' works (artists are from different time periods and/or location.
- 8. 3-5 page Research Paper: Compare and Contrast two artists' works (artists are from different time periods and/or location.
- 9. Oral presentation; group projects.
- 10. 3 page analytical essay on a character from a short story studied in class.
- 11. A case study required students to write a memorandum communicating the overview of the project. Attachments include the Excel file containing the IP addressing scheme and the Word file containing the comparison of dynamic routing protocols and the student's choice based upon the given guidelines of the case study.
- 12. The assignment was a 3-4 page report on a concert which the student attended.
- 13. Prepare 3 year strategic plan for years 17, 18 and 19.
- 14. Book Review on 1865, A Year in the South, by Stephen Ash.

15. 10-15 minute Class Teaching Project that entailed a selection of their audience, research of the data, development and implementation of a medical related teaching plan based on the assesses audience need, etc. The students completed their assignment by teaching to their respective peers.

- 16. The students were to write textual analysis of *The Tempest* or *Romeo and Juliet*, where they explored modern film versions placed against the text.
- 17. Students had to take an article that they wrote at the beginning of the semester and revise it after weeks of practice and instruction.
- 18. 2-4 page critical essay comparing two science fiction novels
- 19. 2 page memo comparing a survey to the recommendations regarding surveys from our course textbook.
- 20. Project entail the development of a bill material to complete the task missing items cause a delay in project and possible missing completion date. Development of an electrical specification and communication with other groups for time/space proper wiring.
- 21. Presentation of Modeled Animal project
- 22. Oral presentation of Digital Portfolio
- 23. Compare and contrast paper—3-5 research paper, 2 artist works being address from different time periods and location.
- 24. Oral presentation of final semester long pieces and critique of classmates
- 25. Oral presentation and critique of other classmates last perspective drawing
- 26. Final independent project and presentation of project to entire labs
- 27. Informative Speeches—students must give an informative speech on a topic that is of interest to them. Outline required.
- 28. Students located a research paper and answer several questions. (information is included with report)
- 29. Writing Lab #3 was to use more than one source (plus one's own thoughts) to identify what will happen to U.S. interests in foreign affairs due to the death of Osama bin Laden.
- 30. Students were given excerpts from Alexis de Tocqueville's Democracy in America and Charles Dickens' American Notes. Each describes early 19<sup>th</sup> Century America. Students were to compare & contrast the authors' impressions and determine why each author said what they did. (Tocqueville is more positive than Dickens.) Assignment tests students' reading comprehension and writing abilities. There were about 16-17 pages of text; essays submitted ranged from 3 to 7 pages.
- 31. The assignment assessed was the final written stock project, in which students were tasked with picking an unknown corporation and reporting on the business, its history, and the relevance of the highs and lows of its stock price over time. Submissions averaged 8 pages in length, and the structure of each report was left for the students to define.

32. Oral presentation with PowerPoint everyone, everyone gets a different country (Not U.S.) 8-10 minutes on business etiquette; customs of that country a business person would need to know if communicating and doing any form of business with that country.

- 33. Write a 7-10 page research paper in APA style format including 5 scholarly journals on a topic related to human development.
- 34. The students will write a competency statement on how they will promote language development and communication with young children in an early care setting.
- 35. The students are to write a statement demonstrating their competence in the area of communication (standard 1.2.7). Examples of work (observations, artifacts) are to support this statement.
- 36. Students will create their ideal classroom in a box using materials found in their home environment. Students will give a detailed explanation of the reasoning behind the classroom elements. Students will video their explanation of their box to upload into Foliotek.
- 37. Selecting five reading passages from Part Three in the textbook use one of the textbook models for constructing/writing a summary of each reading passage.
- 38. Informative Speeches: Students must give an informative speech on a topic that is of interest to them. Outline required.
- 39. Choose a product (person, place and thing) and create a complete brand and ad campaign.
- 40. A group debate which requires both intergroup and public communication.

## Division Report

## English and Humanities

English

Writing Sequence

English

Reading

Philosophy/Religion

Contemporary Ethical Problems Introduction to Philosophy

### **English Assessment Report for Academic Year 2010/2011**

Reported by John Hardecke, Division Chair: English and Humanities August 8, 2011

#### **Context:**

During the 09/10 academic year, the English department met frequently to review and revise all of its assessment processes, driven largely by the results from the previous year's assessment of the writing sequence (EN0133, EN1223, and EN1333, also referred to as Intro to Writing, Comp I and Comp II), which indicated weak performance in EN1333 in core skill areas: persuasion, analysis, synthesis, documentation, organization and style. See ECC Assessment Report 2010 for specifics as to changes and recommendations for improvement.

During the 10/11 academic year, the English department fully implemented a revised embedded assessment process, gathering results from SP and FA 2010. With all departmental documents revised and clarified, a focused effort on applying and gathering results for the embedded essay (or Common Assignment) in the writing sequence was implemented, with over 90 percent participation by all instructors. In short, each instructor was required to turn in one folder of Common Assignment essays for each of his or her sections during the FA 2010 semester. All of the folders were sorted and a 1/3 sample was taken from each stack of essays. Scoring sessions were set up during SP 2011, and SU 2011; the samples were scored by both full- and part-time English faculty, using the rubrics developed during the previous spring. Each essay was scored twice for a pass/fail score and specific scores for the four criteria: content, organization, style, and writing conventions. Two scores of 18 or higher resulted in a passing score; two scores of 17 or lower resulted in a failing score. One pass and one fail forced the sample to a third reader to break the tie. We also gathered and examined the common essay assignment sheets from all instructors, looking for patterns or suggestions for improvement.

### **Results and Analysis:**

The results section will contain a summary discussing points of interest. The appendices contain four pages of charts illustrating the key results—or one chart for EN0133, EN1223, EN1333, and EN1223-Dual Credit. Each chart-page of results will illustrate the same six graphs with the components as follows.

- Figure 1: Pass/fail rate for the sample, with a passing score being 18/25.
- Figure 2: The average scores on the four criteria, based on two or three readers.
- Figure 3: Final course/semester grades for the students sampled.
- Figure 4: Final course grades breakdown to A, B, C, D, and F.
- Figure 5: Final course grade breakdown for essays that **passed** the assessment.
- Figure 6: Final course grade breakdown for essays that **failed** the assessment.

### **Analysis:**

Regarding the results from Figure 1, the pass/fail rates for the four courses, the highest pass rate was found in our Dual Credit English Composition program, which sampled essays from students at Washington, Union and Cuba high schools, with a pass rate of 68 percent. The Comp II sample suffered the lowest Pass/Fail rate, with only 32 percent passing. Comp I and Intro to Writing finished with rates of 53 percent and 44 percent passing respectively. While these pass rates seem dismal, they will serve as the benchmark for the current and future rounds of assessment. See "Improvements" section for the strategy to improve these rates.

Regarding the results from Figure 2, evaluation of content, organization, style and writing conventions, the results were somewhat mixed. The Intro to Writing, Dual Credit, and Comp II results were very close, with "organization" showing the highest marks, 80% in Comp II and Dual Credit and 72% in Intro. The Comp I scores for organization, style and writing conventions all came in at 60%, with content being the high mark at 70%. This tells us that we are doing a better job at teaching strong organization and structure skills, but need to push harder on the other elements, especially content.

The third and fourth charts show the final course grades for the students sampled. This is probably the most disturbing of the results we gathered, suggesting grade inflation. This is less true for Dual Credit. During our debriefing after all the results were tallied, many instructors noted that there are other factors that figure in to a final semester grade, such as daily and weekly work, journals, quizzes, participation, etc. So it should be noted that grade inflation was generally acknowledged by the faculty, and an effort to manage the points and rewards in a class for non-major assignments, such as formal essays and research papers, will be monitored more carefully.

Figures 5 and 6 show the final course grades for those who passed the assessment with an 18 or higher and those who failed the assessment, scoring a 17 or below. These results were perhaps the most intriguing. The curve for those who passed reveals a classic distribution, with A's at the top, moving down to C's at the bottom. The curve for those who failed showed a high rate of B's and probably far too many A's (considering those essays failed to score a 70 percent on the assessment). Again, this points to grade inflation of some sort. The common essay assignment is intended to develop and reveal success on the main skill areas, and if so many are failing, how can they still pass the course? And indeed how can any of these students score an A for the semester? See Improvements section for our strategy to rectify this outcome. There were only 12 D's reported in the entire sample, a result which seems odd, but most teachers reported that those students who were not passing and knew this to be the case tended to withdraw rather than risk the D or F.

While there is certainly room for improvement in the program as a whole, the faculty were encouraged to not see the pass rates as an indictment of the program, but rather as an early warning, something we can change and improve. Our cohorts who go on to UMSL, MU, Missouri S and T, and other institutions, all compare favorably to students from our peer institutions, so wherever we may be in the grand scheme, we can certainly be proud of a consistent tradition of high achievement for our students. As Division Chair, I explained that I was less worried about "too many A's" and more worried about the basic skills that our assessment seems to be flagging as needing more focus and effort.

### **Improvements:**

All instructors were given the complete results as well as their individual results and ranking. They were encouraged to go back to their grade books and look at who passed and who failed the assessment and compare those results with who got A's, B's C's, etc. with an eye toward improving practices or pointing out inaccurate outcomes (such as when a very good essay still fails the assessment scoring process).

The results were also shared at meetings with the full- and part-time faculty and a list of improvements in practice was generated for the next round of assessment. Among the observations noted at these meetings were the following:

- Some instructors noted that they did not emphasize the importance of the common essay in their classes, sometimes adding it at the end when some students are simply "worn out." As a result, placement of the common essay in the course (or embedding it appropriately) was discussed. Others noted that they may not have crafted a suitable assignment that met the parameters of the common assignment and emphasized the four criteria that would be used to score them.
- Some indicated the rubric was simply too demanding and that a revision might be in order. On this point, we agreed to leave the structure of the rubric the same for the second round (currently underway), to provide a proper comparison from 2010 and 2011.

As a result, the following suggestions were outlined and distributed to all English teachers:

- Focus on the basic goals of each course—better reading, better critical thinking, better evaluation and use of outside sources, better writing overall.
- Be willing to design an assignment that maximizes the elements and goals of the common assignment
- Keep the common assignment in mind throughout the semester. Drill on thesis development, logic, organization, correct and appropriate use of sources, quotes, etc. Hammer away each week if necessary.
- Use the rubrics throughout the semester, making them part of the equation throughout. Make sure the students are well versed in the four criteria.

Regarding the grade inflation issue, instructors were asked to take a hard look at their point systems and adjust them accordingly to more accurately reflect how well students are writing, rather than how well students use their teachers' point systems to their advantage.

Figure 1

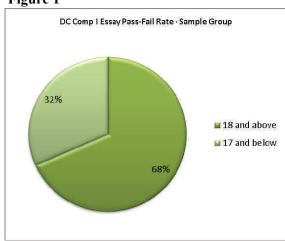


Figure 2

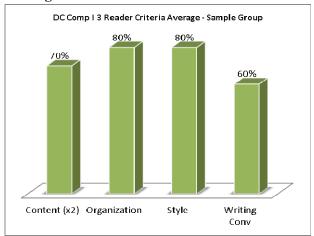


Figure 3

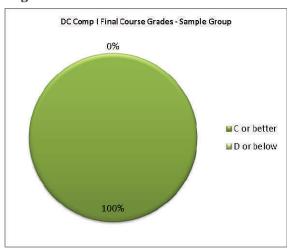


Figure 4

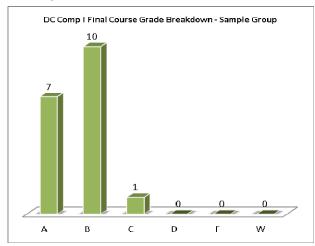


Figure 5

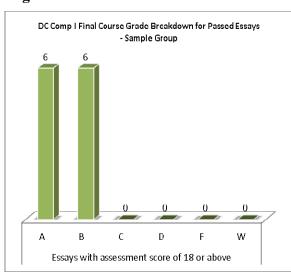


Figure 6

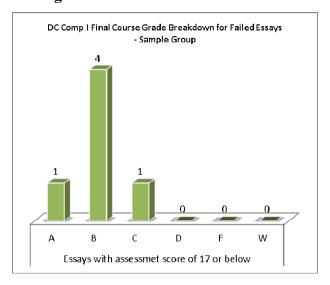


Figure 1

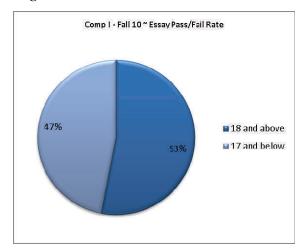


Figure 3

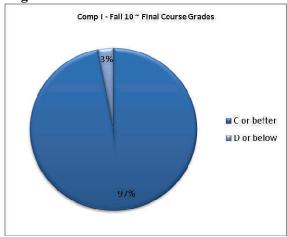


Figure 5

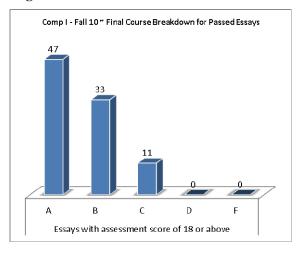


Figure 2

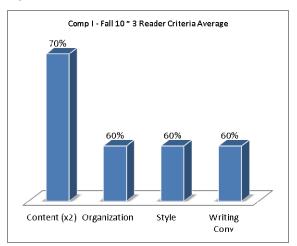


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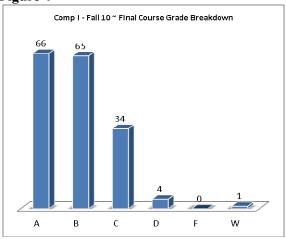


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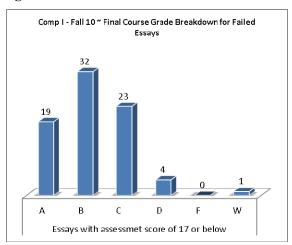


Figure 1

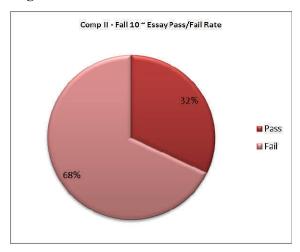


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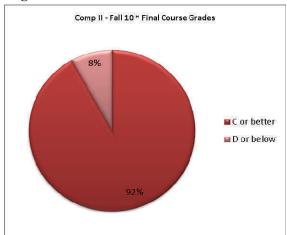


Figure 5

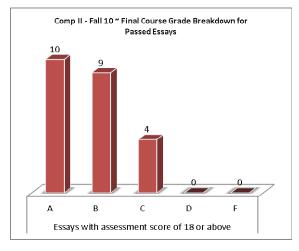


Figure 2

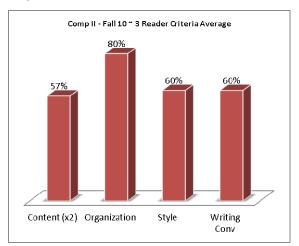


Figure 4

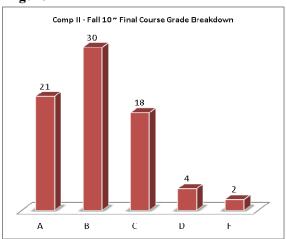
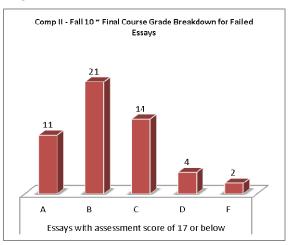
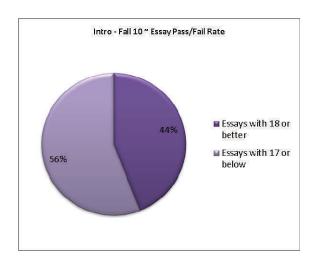
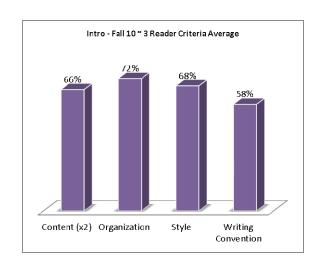
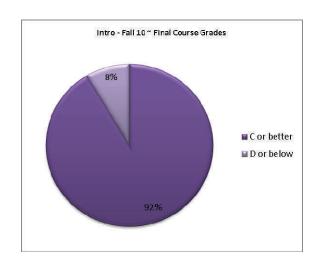


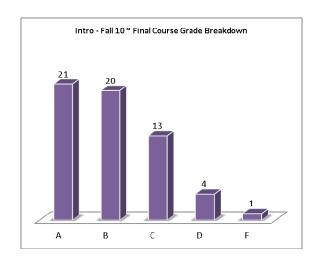
Figure 6

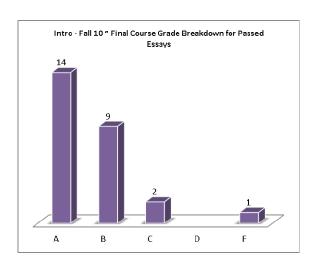


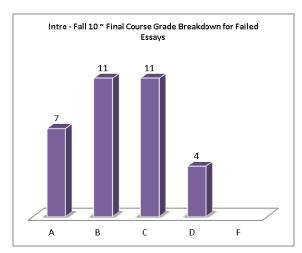












### EN0203 Reading Comprehension-Pre and Post Course Assessment Fall 2010 Assessment Report of Data: Nelson-Denny Forms G&H Submitted by Dan Kern

During the fall 2010 semester, the East Central College (ECC) EN0203 Reading Comprehension course instructors at Union, Sullivan, and Rolla served 128 students that completed the course's Nelson-Denny (ND) Forms G & H, the course's pre- and post-course assessment. At the end of the fall 2009 semester, the instructors at Union and Rolla administered the ND-G&H to 152 students that began and then completed the course.

The purpose of the Nelson-Denny reading survey assesses the person's vocabulary (word power), comprehension, and reading rate. With those three results, the focus is on the reading and making meaning of an author's point and support in passages taken from current upper secondary and postsecondary textbooks. To support the making meaning and solving of questions, the vocabulary section includes words that are mandatory for success in postsecondary classrooms across the curriculum.

The design of the ND is to avoid racial and gender bias and is nationally normed. By using those norms, a student can become aware of how he or she ranks among her and his peers across the nation, resulting in a statement of standing at the beginning of a postsecondary program into which the person will narrow his path of success and also will become aware of how she or he ranks with peers who are beginning a similar path. The insight should reveal a person's placement among national peers to then increase preparation, practice, and implementation of a plan to improve, continue to use and practice successful strategies, or advance skills' strengths and strategies of reading comprehension.

Condensing the attached data, the results include also a small pilot course at the Southwest Area Center in Sullivan, in addition to the continuing EN0203 course at the ECC-Rolla campus. The fall 2010 indicated 50 of the 152 increased her or his performance by one or more stanines. Further, the percentile rank increase ranged from 2-58. Fall 2009 results included 64 of the 152 gained a one or more increase in stanine with a range of percentile increase from 1-41.

Of the fall 2010 students that earned no increase or decrease in stanine, those results revealed that 14 of those 36 students had increases in their national percentile ranks. By comparison, of the fall 2009 students that had no increase or decrease in stanine, the result stated that 22 of the 46 increased in their national percentile rank, ranging from 2-15.

### The overall results of the 128 students from fall 2010 completing the ND G&H:

50 (39%) increased one or more national stanines, a range-of-increase from 1/lowest and 4/highest;

36 (28%) whose G&H stanine remained the same, increased in national percentile rank;

42 (33%) decreased in stanine, -1 to -3.

### The overall results of the 152 students from fall 2009 completing the ND G&H:

64 (42%) increased one or more national stanines, a range-of-increase from 1-4;

46 (30%) whose G&H stanine remained the same, increased in national percentile rank;

42 (28%) decreased in stanine, -1 to -3.

### Reviewing fall 2008, of the 82 students that completed the ND G&H:

41 (50%) increased one of more national stanines, a range-of-increase from 1-3;

23 (29%) whose G&H stanine remained the same, 21 increased in national percentile range-of-increase from 2-16.

18 (22%) decreased in stanine, -1 to -2.

### Reducing data to compare increased national stanine, 1 or more:

Fall 2010: 39%

Fall 2009: 42%

Fall 2008: 50%

### Decreasing national stanine, 1 or more:

Fall 2010: 33%

Fall 2009: 28%

Fall 2008: 22%

### No change in national stanine with increase in national percentile rank:

Fall 2010: 28%

Fall 2009: 30%

Fall 2008: 35%

Because of the intent to value assignments so that the results of the ND G or H do not severely penalize a student, the impact is completing the ND-H as the last assignment usually results in successfully completing the course (C, B, or A).

Traditionally and experientially, quantity does not equal quality, illustrating that more time with each student (dividing class time and office hours and outside class and office hours by number of students served) somewhat increases success rates and, moreover, the individual's successful learning pace can be more coached, guided and assisted, as time and course ingredients (integrated class time, individual time, and in-class assisted computer time) can individualize and self-pace a person, especially those at or below a successful learning pace for the length of a postsecondary semester. Indicating practice is needed from the results of previous academic

or occupational experience then again with the ACCUPLACER reading and sentence skills results and maybe again with the ECC challenge assessment, adding any multiple attempts at the ACT or similar instruments, seems to bring about the need for a self-paced and individualized attempt with each individual in an environment designed and implemented and adjusted over time for the individual student's practice and resulting successful learning and thinking pace.

Attached are also the ECC Institutional Research data (A Little Data), indicating a strong connection between those students who were not passing EN0203 and attempting EN1223 English Composition I as compared to those who passed EN0203 and attempted EN1223. Based on those data and beginning with fall 2010, EN0203 is a pre-requisite for EN1223.

With the completion and the moving back into the renovated building completed prior to the fall 2011, the format of the class-time structure has changed with now a segregated classroom and computer room. With this adjustment to the curriculum, the fall 2011 students and their results will initiate a new baseline study to replace the previous integrated practices with classroom and supplemental computer activities.

To add to and increase the delivery of services, two web-based programs have been added to the existing one web-based program. One of two added programs improves from network to web-based a networked program in use for several years. The other web-based is a comprehensive reading skills, strategies, and comprehension, self-paced and adaptable program that adds study skills, grammar components, and reading rate. With the recent purchase of that program, we instructors are learning at a pace to begin when ready or to start the spring semester.

To adequately, patiently, and practically step through the stages for adding the improvements of facilities, segregated class and computer rooms, added software, and increased student enrollment, another improvement to build on two pilot semesters is the adding of two EN0203 sections at Sullivan, adjusting from a near online pilot to a hybrid format with which to experiment, gather data, and draw conclusions for improving the Sullivan EN0203 model.

Because the Sullivan format mirrors the previous course format—integrated classroom and computer room, we find ourselves with a model to compare and contrast the Union course format. Additionally, with an office hour in Sullivan, we can nearer compare that usage with Union, seeking results to inform and improve student services for their EN0203 experiences with the course.

With the advantage of six instructors, one full- and five part-time, we can experiment with course offerings, piloting and affecting more the role of an integrated reading-writing mix that allows those to develop or continue developing a practicing connection with the similar or parallel language that can be used for the basic five steps in the formal reading and formal writing process. To aid this effort, collaboration structured with the writing instructors can assist in developing common paths of integrated assignments to practice rough read/rough draft, revise reading to purpose/second draft, etc.

Continued emphasis on the hierarchical model of questioning and thinking and conversing that is the original Bloom's Taxonomy introduces persons to the clear model of the required stages of information processing that is the vertical acquisition of a postsecondary successful completion of program.

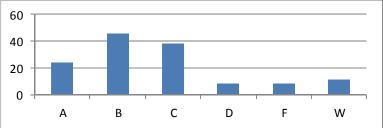
Previous to Bloom's a statement of metacognition can be placed as the front door before Bloom's. Assessing one's own thinking in a structured way might be a designed component to add to the course. The wide use of links and materials from <a href="www.criticalthinking.org">www.criticalthinking.org</a> in many postsecondary courses or generally at postsecondary institutions indicates more research and practice applications of assessment or the Miniature Guides offered on critical thinking cognitive requirements.

While beginning research on blending in the seven major components of study skills, a piloting of assessing and then using those seven basic areas' student results could make for a more effective and comprehensive course for each student.

Using the results of this first semester use of the new facilities will offer us the opportunity to open an improving element to our current format while gathering baseline data for comparing 2010 to 2011 for first-time efforts in our new facilities with the previous format. Further, with an additional two adjuncts, our program has the advantage of engaging those persons' experience and information into our continuing piloting and searching and researching for best efforts for best results based on best practices in our field and curriculum to bring the student successfully from the start and finish of her or his ECC semester, allowing the individual's pace, participation, and feedback and suggestions to guide us and our program's success, step by step.

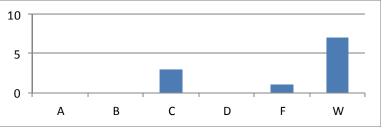
### Grades in English Comp I of those who passed Reading Comp (Grades A, B & C)

Grade	Grade Count			
Α	24			
В	46			
С	38			
D	8			
F	8			
W	11			



### Grades in English Comp I of those who failed Reading Comp (Grades D,F & W)

Grade	Grade Count
Α	
В	
С	3
D	
F	1
W	7



#### Notes:

Reading Comprehension students took the class in either 08/FA and/or 09/FA. Highest grade used for this study. Assumed (!!!) that the reading students took English Comp I either after or concurrently with Reading Comprehension

### Results of Assessment Tests (Taken Before and After a Course) Richard Knudsen Spring, 2011

### CONTEMPORARY ETHICAL PROBLEMS (two classes)

For convenience, I have given the results of these two Ethics classes together.

The SAME TEST containing 17 questions was given at the very beginning of the semester, during the first week of classes, and was given again when the semester was over after the final exam.

RESULTS of the FIRST TEST given in January, 2011.

No. of Students having the Correct Answer	No. of Correct Answers out of 17	Percentage Correct out of 17
6	0	0%
8	1	6%
7	2	12%
10	3	18%
7	4	24%
7	5	29%
4	6	35%
3	7	41%
1	8	47%
1	9	53%
1*	10*	59%

<sup>\*</sup>This student stated that he had had a course in Ethics before taking this course.

RESULTS of the SECOND TEST given after the Final Exam.

1	6	35%
3	7	41%
2	8	47%
7	9	53%
4	10 Highest score	59%
	From 1 <sup>st</sup> test	
8	11	65%
5	12	71%
6	13	77%
8	14	82%
2	15	88%
3	16	94%

(None got all 17 answers correct.)

Fall 2011 Assessment Report

### Results of Assessment Tests (Taken Before and After a Course) Richard Knudsen Spring, 2011

### INTRODUCTION TO PHILOSOPHY

The SAME TEST containing 18 questions was given at the very beginning of the semester, during the first week of classes, and was given again when the semester was over after the final exam.

RESULTS of the FIRST TEST given in January, 2011.

No. of Students having the Correct Answer	No. of Correct Answers out of 18	Percentage Correct out of 18
1	0	0%
3	1	6%
4	2	11%
4	3	17%
1	4	22%
1	5	28%
2	6	33%
2	7	38%
1	8	41%
2	9	50%
1	10	56%

No students stated that they had had any course in Philosophy before taking this course.

RESULTS of the SECOND TEST given after the Final Exam.

2	10 Highest score from 1 <sup>st</sup> test	56%
2	11	61%
1	12	67%
2	13	72%
3	14	77%
3	15	83%
6	16	88%
1	18	100%

# Division Report

### Fine and Performing Arts

Music

Instrumental Jury

### **Music Department Instrumental Jury Assessment Report**

The music department's goals in performance are part of the larger goal to prepare students for the transfer program and providing developmental instruction. All students who take Applied Music, must complete a performance exam (jury) at the end of the semester.

The objectives of the performance are:

- Attain performance proficiency at a college level on an instrument.
- Demonstrate satisfactory technical skill on the instrument.
- Experience performing in front of a live audience.
- Acquire performance skill on an instrument to begin the transfer program.
- Demonstrate improvement in instrumental performance skills.

Applied instructors guide students, select repertoire that represents various styles, and promote competence in the instrument. The following rubric is used to assess the instrumental performance:

Technique (5 points)	Scales, arpeggios, etudes
Repertoire Performed (5 points)	Assess general level of literature
Performance Assessment (15 points)	
Accuracy	Notes & rhythm
General Technique	Intonation, tone production, posture, coordination of hands
Nuances	Articulation, dynamics, phrasing, bowing
Interpretation	Tempo, character, other artistic factors

The following gives a number value for the assessments listed above.

Technique			
5 Flawless	4 Minor flaws	3-2 Some inaccuracies	1 Inaccurate
Repertoire Level			
5 Advanced	4 Late Intermediate	3-2 Intermediate	1 Early Intermediate
Performance			
10-9 Artistic Flawless accuracy Musical phrasing Dynamic interpretation	8-7 Somewhat artistic Minor accuracy flaws Somewhat musical Convincing interpretation	6-5-4 Average artistry Some inaccuracies Average musicality Average interpretation	3-2-1 Lacks artistry Unprepared Unmusical phrasing Inappropriate interpretation

The following results are from seven students' Performance Assessment on Brass and Woodwind Instruments in May 2011.

<u>Instrumental Jury Rubric Tabulated Results:</u> All of the scores are based on scores from seven students.

Student

			St	udent				
Technique*	1	2	3	4	5	6	7	Average
Scales	4	4	5	3	3	2	4	3.57
Tone Production	3.5	4	5	3.5	4	3	5	4.00
General Technique	3.5	5	3	4.5	4	4	3.42	3.92
Dynamics	3	3.7	5	2.5	3.5	2.3	5	3.57
Rhythm	2	4	5	3.5	4.5	4.3	5	4.04
Articulation	2.5	4.3	4	4	5	4	4.5	4.04
Intonation	3.5	3.3	4.5	3.75	3.5	3	4.5	3.72
Note Accuracy	4	4.3	4.5	4	4.5	3.3	5	4.23
Interpretation	4	3.4	5	4	4.5	3.3	5	4.17
Repertoire	4	4	5	4	5	3	5	4.29
Performance (Overall Jury Grade)	10	8	8	10	8	6	8	8.29

<sup>\*</sup>Note: Scales through Repertoire scores are based on a 1 (lowest) to 5 (Highest) scale. The Performance (Overall Jury Grade) score is based on a 1 (lowest) to 10 (Highest) scale.

### **Basic Analysis**

The outcomes of this assessment indicates that:

- Students are learning appropriate repertoire for their level because the repertoire scores suggest the students are able to learn and interpret the music score.
- Students are not as prepared for their basic technical regiments, such as scales, technical exercises, and intonation.
- Students need to continue to work on improving their artistic expression, listening to great recordings, attend professional concerts, and learn to observe and listen more attentively.
- The students need to increase their daily practice time on basic technical skills. The technical proficiency can only be acquired by diligent and disciplined practice.

# Division Report

### Science

Biology
Microbiology
Environmental Science
Health Science
Medical Terminology

### Microbiology Lecture & Lab (BI 2403 & 2411) Assessment Report

Submitted by Kevin Dixon

### History:

When ECC moved from the traditional 10-year accreditation cycle to AQIP several years ago, the Biology department was asked to focus first on the General Biology and Principles of Biology courses. Assessment activities in some higher-level department courses, including Microbiology, began relatively recently.

### Course Instruction:

Microbiology lecture and lab courses are program requirements for students completing an Associate Degree in Nursing (AAS) degree. Nearly all students in the class are pre-nursing or nursing students, with a few students coming from other allied health-related fields. The courses may be taken by Biology and Medical Science majors as elective credits in their Associate of Arts program of study.

The current lecture course fairly closely follows syllabi for several four-year schools with regard to the content covered. Exercises done in the laboratory component of the course are ones fundamental to learning basic microbiological techniques and skills, with some applications relevant to medical microbiology to aid allied health students in understanding test results they may see in practice in patient care.

To date there have been very few if any problems in the transfer of these courses to 2-year or 4 -year colleges or universities. Receiving institutions usually grant the students transfer credit as Microbiology and not just general elective credit.

Microbiology is taught at both the Union and Rolla locations, and for the past few years it has been offered Fall, Spring, and Summer. Four full-time faculty members have taught the class, though the vast majority of sections have been taught by one Union instructor and one Rolla instructor.

Enrollment numbers have fallen slightly in the past two to three years, at least in part due to the addition of a Chemistry prerequisite to Principles of Biology, which is the only prerequisite to this class. It is anticipated that enrollment will increase as more students complete the Chem/Principles cycle. Occupational Therapy Assistant students may also add to the enrollment numbers as that program is new and students are beginning to complete some of their upper level courses. Physical Therapy Assistant students may also contribute to enrollments

#### Assessment Procedures:

As is the case with nearly all Biology courses there is no nationally-standardized exam available for student assessment. A few semesters ago the current course instructors decided on a pre-test/post-test means of assessing student learning. This exam consisted mostly of questions drawn from the final exam for the course given at the very beginning of the course. These questions appeared on the final exam, so a direct comparison was drawn between the scores achieved.

No formal assessment for the laboratory has been developed, as topics covered in the laboratory are complementary to lecture topics.

Results: (see tables below)

Data show a significant improvement between pre-test and post-test scores, with an average of +92% improvement overall. These data represent between 1/3 and 1/2 of students who have taken the class.

While we hope these numbers support positive learning in the course, the numbers may be misleading. There were several students who showed >+150% improvement in the pre-to-post results. This casts doubt on the validity of the numbers. It seems quite possible that student effort while taking the pre-test was lacking. Future Considerations/Goals:

- 1. All students in all sections of Microbiology should be tested for course assessment purposes. Right now the data are limited as this is a relatively new assessment for the department, and as such all instructors do not have data to include. Centralized collection of the data by a "course" coordinator may help improve this data collection.
- 2. Instructors involved in the course have already begun to discuss what changes can be made to the pre-test and post-test to more accurately reflect student learning.
- 3. The search for a nationally standardized exam needs to be continued.
- 4. Recently the American Society for Microbiology (ASM) published curriculum guidelines as to what an introductory microbiology course should include. The classes as taught now compare favorably, though discussions have been initiated as to how we may more closely align to those published guidelines.
- 5. Three of the four current Microbiology instructors have been able to attend the national "Conference for Undergraduate Educators" hosted by ASM. Plans are being made by at least one instructor to attend ASM's General Convention in 2012 or 2013.

### Pre-test and Post-test Results for Selected Sections of BI 2403/2411

SU09 Student 1 Student 2 Student 3 Student 4 Student 5 Student 6 Student 7 Student 8	Pretest 10 11 9 10 10 14 11 9 out of 22	Post test 16 20 17 13 19 22 17 12 out of 22	% Change 60% 82% 89% 30% 90% 57% 55% 33% 62%
FA10 Student 1 Student 2 Student 3 Student 4 Student 5 Student 6 Student 7 Student 8 Student 9 Student 10 Student 11 Student 12 Student 13 Student 14 Student 15 Student 15 Student 16	Pretest 10 8 9 5 4 7 10 8 5 8 7 8 8 11 5 5	Post test 18 14 14 15 13 13 15 12 12 15 15 15 17	% Change 80% 75% 56% 200% 225% 86% 50% 50% 140% 88% 114% -25% 138% 18% 240%
SP11 Student 1 Student 2 Student 3 Student 4 Student 5 Student 6 Student 7 Student 8 Student 9 Student 10 Student 11 Student 12	out of 23  Pretest 11 11 6 15 7 7 11 6 8 10 11 9 out of 23	out of 23  Post test 17 13 18 16 16 18 14 15 13 19 12 21 out of 23	110.86% % Change 55% 18% 200% 7% 129% 157% 27% 150% 63% 90% 9% 133% 86%
Overall All Students	Pretest 9	Post test 15	% Change 92%

# Introduction to Environmental Science Assessment Report – AY 2010-2011 Submitted by Parvadha Govindaswamy

### Data Source:

The assessment report is for Introduction to Environmental Science class sections taught at the main campus and Rolla campus during Fall 2010 and Spring 2011. The data used for this report originated from three out of six sections of the course in Fall 2010 and two out of five sections of the course in Spring 2011.

### Type of assessment:

Assessment was performed by comparing scores made on a pre-test to that made on a post-test. A common pre-test and post-test was used in all of the course sections from which the data for this report have been obtained.

#### Data for Fall 2010:

For Fall 2010, comparison of overall scores made on pre-test and post-test is being furnished.

Table 1: Score comparison for Section 1 (ES\_Day\_FA10; n=12)

	Minimum Score (%)	Maximum Score (%)	Average (%)
Assessment period	40.0%	92.0%	71.4%
Pre-test	40.0%	92.0%	67.8%
Post-test	60.0%	96.0%	84.7%
	24.93%		

Table 2: Score comparison for Section 2 (ES\_Night\_FA10; n=21)

	Minimum Score (%)	Maximum Score (%)	Average (%)
Assessment period	32.0%	90.0%	74.5%
Pre-test	44.0%	88.0%	64.8%
Post-test	0.0%	96.0%	83.5%
	Percent increa	se in performance (%)	28.9%

Table 3: Score comparison for Section 3 (ES3B FA10 Assessment; n=12)

	Minimum Score (%)	Maximum Score (%)	Average (%)
Assessment period	30.0%	75.0%	59.9%
Pre-test	33.3%	73.3%	56.7%
Post-test	26.7%	86.7%	65.6%
Percent increase in performance (%)			15.7%

On an average there was a **23.1% improvement** in student performance in the knowledge tested for in the assessment.

### **Data for Spring 2011**

For Spring 2011, comparison of overall scores made on pre-test and post-test and item analysis of performance on post-test is being furnished. Please refer to appendix 2 for item analysis of the post-test.

Table 4: Score comparison for Section 1 (ES1 Sp11; n=22)

	Minimum Score (%)	Maximum Score (%)	Average (%)
Assessment period	53.6%	89.3%	69.3%
Pre-test	32.1%	89.3%	59.1%
Post-test	64.3%	92.9%	78.7%
Percent increase in performance (%)			33.16%

Table 5: Score comparison for Section 1 (ES2\_Sp11; n=16)

	Minimum Score (%)	Maximum Score (%)	Average (%)
Assessment period	46.4%	94.6%	73.3%
Pre-test	32.1%	92.9%	63.2%
Post-test	60.7%	100.0%	83.5%
Percent increase in performance (%)			32.12%

On an average there was a **32.64% improvement** in student performance in the knowledge tested for in the assessment.

### **Summary:**

Fall 2010 is the first time assessment was performed for Introduction to Environmental Science course. The assessment questions were designed to test the general environmental awareness of the students enrolled in the course. Mistakes in questions in the Fall 2010 tests were revised in the Spring 2011 tests.

Starting Spring 2012 assessment of the course will include assessment questions based on concepts in addition to assessment of general awareness. Instructor's currently involved in teaching the course will take part in identifying concepts within the course work.

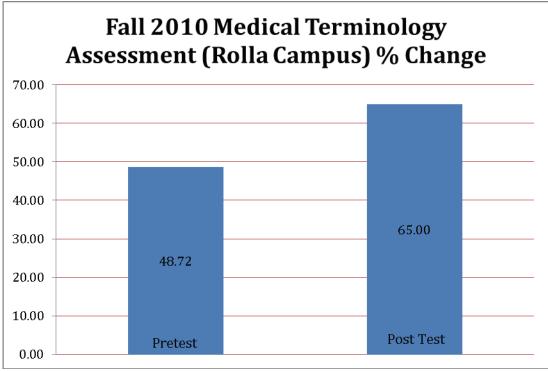
### **Medical Terminology Assessment AY2010-2011**

Submitted by Kamealya Farrell June, 2011

Medical Terminology is currently being offered at both the Union and Rolla campuses. It is taught by both full time faculty and adjunct faculty members. Course objectives, textbook, and course material are consistent in all sections that are offered however delivery method varies slightly as we currently offer both traditional and hybrid sections on the Union Campus and hybrid only on the Rolla campus.

### A) Fall 2010:

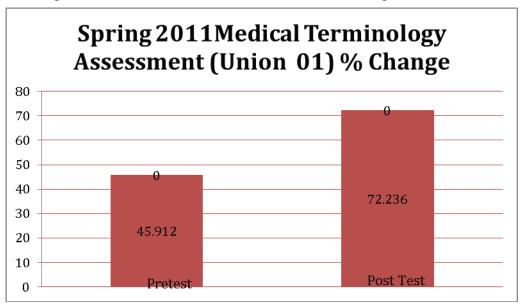
An assessment plan consisting of a pretest and posttest was initiated in the Fall of 2010. Data is limited to the Rolla assessment data as the both Union campus' sections were to be administered on the Thursday of finals week which was a snow day.



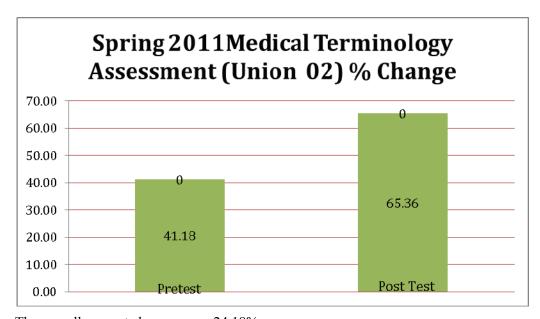
The overall percent change was a 16.28%.

### **B) Spring 2011:**

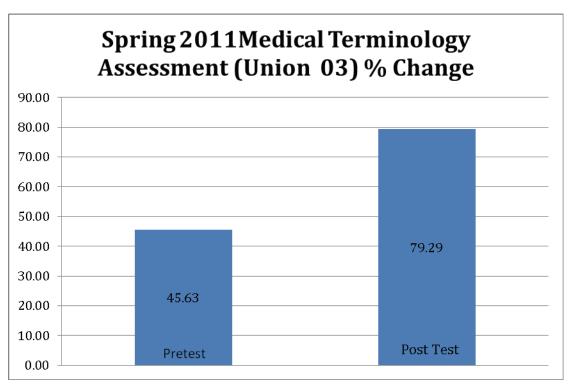
The same assessment plan and tool was utilized in the Spring 2011 semester on both the Union and Rolla campuses. All sections of Medical Terminology were given the pretest and posttest; however there was one section where the exam was not administered in the same way. The pretest examination is to be given to the students in the first class meeting to capture the student's knowledge at that point. One of the sections did not receive the exam until after a couple of class periods, so the data is void and not shown in this report.



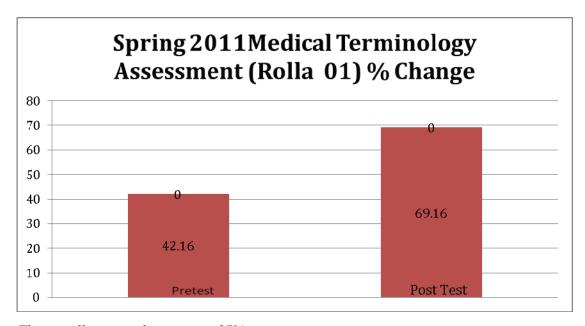
The overall percent change was a 26.32%.



The overall percent change was a 24.18%.



The overall percent change was a 33.65%.



The overall percent change was a 27%.

Overall for the Spring 2011 semester, there was an average percent change of 27.79%.

### **Medical Terminology assessment in the future:**

In the Spring of 2011, all faculty members teaching Medical Terminology were surveyed on the course and the assessment tool. A consensus was reached that we would keep using a pretest/posttest assessment tool with questions randomly pulled from the instructor resources. Starting in the Fall 2011 semester, all faculty members will give the pretest on the first meeting with students. Adjunct faculty will have a proctor for their examinations to ensure that the examination is given to the students and returned to the coordinator of Health Sciences for an item analysis report.

Another useful piece is that starting in the Fall semester a detailed analysis by concept and Unit will be used to help identify strengths and weaknesses in the assessment tool and opportunity areas overall in the course.

## Division Report

### Mathematics & Physical Science

Introductory Algebra

### **Introductory Algebra Assessment Report**

Submitted by Ann Boehmer

Introductory Algebra, MT0203, is the first course in a two-course algebra sequence designed to prepare students for coursework in college level mathematics. Students will be introduced to basic algebra topics and applications. When successfully completed (grade C or better), the course satisfies the college's prerequisite for Intermediate Algebra. Upon successful completion of MT0203, students will:

- Utilize the Properties of Real Numbers (review from MT0103)
- Solve linear equations with rational coefficients.
- Solve linear inequalities, including two-variable systems and compound inequalities; express solution in set-builder notation, interval notation, and graphically; identify unions and intersections of sets.
- Solve applications involving rates and percents.
- Solve applications using a step-by-step application process; translate English sentences into algebraic expressions/equations and apply appropriate formula, including utilizing basic geometry formulas.
- Understand and use the Cartesian coordinate system; plot and interpret graphs without a calculator.
- Determine and interpret slope of a graph and a linear equation (including parallel and perpendicular); find and utilize x- and y- intercepts.
- Interpret and write linear equations using slope-intercept and point-slope form.
- Solve linear systems and applications of two-variable linear systems by using the elimination, substitution and graphing methods.

The prerequisite for MT0203 is a minimum grade of "C" in MT 0103 or an appropriate math placement score, using Accuplacer as the placement test. When successfully completed (grade C or better), the course satisfies the college's prerequisite for Intermediate Algebra.

Introductory Algebra is taught by full-time and adjunct instructors at the main campus (Union campus) and at three satellite sites (Rolla, Sullivan, and Washington – Four Rivers). It is predominately taught in a traditional format, although one on-line section is offered each semester. The course is overseen by the Mathematics Department and currently requires the use of a departmental syllabus, as well as a department mandated text, midterm, final, and recommended grading practices.

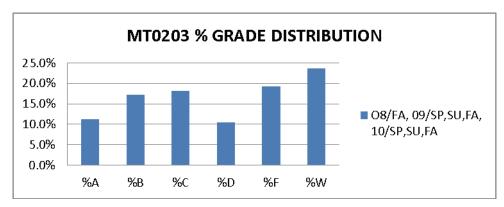
The departmental syllabus contains the course description, course prerequisites, required textbooks and materials, a list of course competencies and objectives, a list of required chapters to be covered, as well as required departmental midterm and final exam policies. In Fall 2010, the department created grading guidelines and standards for all developmental courses. These guidelines included:

- No calculator be allowed on any assessment consisting solely of Chapter 1 material; students are permitted to use a non-graphing calculator on the common exams.
- Sufficient practice is vital to student success. Homework and other assignments are encouraged and may be worth up to a *maximum* of 20% of the overall course grade.

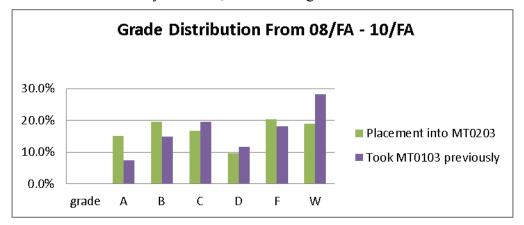
• Due to the developmental nature of students in these classes, at least 3 in class exams in addition to the departmental midterm and final must be given. Individual assessment in the form of quizzes, exams, the midterm and final must make up at least 80% of the overall course grade; no exam being weighted more than the final exam in calculation of the overall course grade.

- The departmental midterm is to be administered to individual students in class as a closed note, closed book exam. The value of each question is stated in the exam, no partial credit is given on the multiple choice section, and no copies of the midterm should be retained by any instructor. The midterm is to be worth a *minimum* of 10% of the overall course grade (the value not exceeding the percentage designated for the departmental final exam). The only permissible replacement of grade on the midterm is the percentage earned on the final exam.
- The departmental final exam is to be worth a *minimum* of 20% of the overall course grade, and may not be dropped or replaced with any other grade. The final is a closed note, closed book exam, and is taken at the end of the semester according to ECC's Final Exam schedule. Each student will work individually and must achieve a minimum score to pass this class with a "C" or better (60% in MT0203). The value of each question is stated in the exam, no partial credit is given on the multiple choice section, and no copies of the final exam are to be retained by any instructor.
- A departmental Final Exam Review is available; any supplemental review is to be approved by the Division Chair.
- Make-ups of the Final Exam are strongly discouraged but may be considered for extenuating circumstances. The Division Chair must be notified of all Final Exam make-ups.

The following contains the grade distribution, in percentage, of MT0203 for the fall, spring, and summer semesters from Fall 2008 to Fall 2010.



Comparing grade distributions for students who have placed into MT0203 versus those who have taken MT0103 followed by MT0203, the following results were observed.

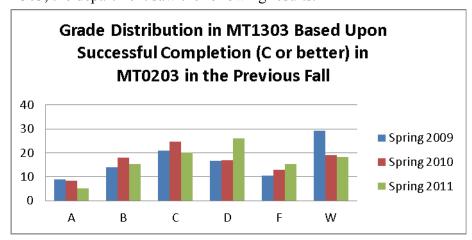


In Fall 2009, Accuplacer was adopted as ECC's placement test. Since that time, the success rate (completed with a C or better) of those placing into MT0203 has increased from 48% to 55%. In the same time period, the success rate in MT0203 for those coming from MT0103 has remained relatively constant (43.7% 08/FA - 09/SU versus 42.3% 09/FA - 11/SP).

To address success rates the following changes have been implemented:

- A new text was adopted to better align the course
- Added a four-hour Extended Introductory Algebra, MT0204, to provide an opportunity to students who placed into the upper range of MT0103 to meet the placement requirement for MT1303 in one semester instead of two, by focusing on designated skills from MT0103 and learning MT0203 in the same semester
- Offered accelerated classes
- Created a midterm to assess student knowledge midway through the content
- Evaluated and revised the final exam
- Raised the minimum requirement on the final exam in MT0103
- Standardized assessment policies in all developmental courses.

In reviewing the success rate of students is the subsequent course in the sequence, Intermediate Algebra MT1303, the department saw the following results.



Using this information, the department has set the following goals for the upcoming 2011-2012 academic year.

- Review course objectives and competencies. Evaluate the alignment of course objectives and the final exam with the placement exam in subsequent courses.
- Research and discuss course redesign for the developmental sequence, emphasizing mastery learning.
- Continue to monitor recent changes in MT0103 and their effect on success rates throughout the developmental program.

# Division Report

### Nursing and Allied Health

Nursing

Nursing Program - Union Campus Nursing Program - Rolla Site MSBN Survey Information Radiologic Technology

#### **Nursing Department Report**

Submitted by Robyn Walter, Division Chair Allied Health

**Program Assessment** 

**Division: Allied Health** 

**Department: Nursing at the Union Campus** 

Reporting Period: End of Program – Graduates May 2010

Reporting Date: June 1, 2011

**Assessment Measure: National Council of State Board of Nursing Exam (NCLEX-RN)** 

Graduates have the following curriculum outcome measures:

- Utilize the nursing process as the basis for the delivery of health care.
- Participate knowledgeably in the prescribed medical regime.
- Establish and maintain positive interpersonal relationships with clients, families, and other members of the health team.
- Function as a teacher of clients who need information or support to maintain health.
- Serve as a manager of nursing care for a group of clients with a variety of health problems in various settings.
- Function as a member within the profession of nursing.

These outcome measures are assessed at various points during the curriculum in a formative process. Graduates are assessed in a summative nature when they sit for the NCLEX-RN comprehensive examination. Successful completion of the examination is required to enter the profession as a registered nurse.

- 21 nursing graduates
- 21 tested
- 21 pass
- 0 fail

**2010 Program Pass rate:** \*100.00%

**2010 Missouri Pass rate: \*88.42%** 

**2010 National Pass rate: \*87.42%** 

The results were reviewed in the Total Program Evaluation. There were no significant changes to the curriculum or student services

<sup>\*</sup>First-time testing results

#### **Nursing Department Report**

Submitted by Robyn Walter, Division Chair Allied Health

**Program Assessment** 

**Division: Allied Health** 

**Department: Nursing Program at the Rolla Location** 

Reporting Period: End of Program - Bridge Graduates December 2009 Reporting Period: End of Program - Generic/Pre-Licensure Graduates May 2010

Reporting Date: June 1, 2011

**Assessment Measure: National Council of State Board of Nursing Exam (NCLEX-RN)** 

Graduates have the following curriculum outcome measures:

• Utilize the nursing process as the basis for the delivery of health care.

- Participate knowledgeably in the prescribed medical regime.
- Establish and maintain positive interpersonal relationships with clients, families, and other members of the health team.
- Function as a teacher of clients who need information or support to maintain health.
- Serve as a manager of nursing care for a group of clients with a variety of health problems in various settings.
- Function as a member within the profession of nursing.

These outcome measures are assessed at various points during the curriculum in a formative process. Graduates are assessed in a summative nature when they sit for the NCLEX-RN comprehensive examination. Successful completion of the examination is required to enter the profession as a registered nurse.

#### 2009 Bridge Graduates 2010 Generic/Pre-Licensure Graduates

• 13 nursing graduates

• 13 tested

• 11 pass

• 2 fail

• 12 nursing graduates

• 12 tested

• 12 pass

• 0 fail

2010 Class Pass rate: \*84.62% 2010 Class Pass rate: \*100%

2010 Program Pass rate: \*92.00% (Includes Bridge and Generic programs per MSBN)

2010 Missouri Pass rate: \*88.42% 2010 National Pass rate: \*87.42%

\*First-time testing results

The results were reviewed in the Total Program Evaluation. There were no significant changes to the curriculum or student services. One student in the Bridge program waited over 11 months to test and subsequently failed.

#### East Central College Nursing Department Graduate Survey

PLEASE RETURN BY:
August 1, 2011

Thinking back to your experience at East Central College and your nursing education, please answer the following questions.
In what year did you graduate from ECC's Nursing Program?
2. Are you still active in the profession of Nursing?
a. If NO, why are you no longer active in nursing?
What is your primary field/clinical practice area and place of employment? <u>Telemed, , ICU, Med Surg</u> , ortho, ER, <u>Rehab</u>
4. How would you describe your primary role?Staff Nurse, Charge Nurse, trauma team member
5. Do you belong to any professional nursing organizations? 3 YES 11 NO
If you answered YES, please indicate which organization
<ul> <li>a. If you answered YES, would you choose ECC's Nursing Program for your professional education?</li> <li>11 YES 3 NO</li> </ul>
7. How well-prepared were you for the State Board Licensure exam? <u>10</u> EXCELLENT <u>4</u> GOOD <u>FAIR</u> POOR
8. How well-prepared were you for your first nursing job? _2_EXCELLENT _10_ GOOD _2_FAIRPOOR a. Were you able to apply critical thinking skills in deliberate decision making? _14_YESNO b. Were you able to provide nursing care in accordance with the ANS Standards of Clinical Nursing Practice & the ANA Code of Ethics for Nurses? _14_YESNO
9. As a new graduate, how did you feel you compared to new graduates nurses from other programs?
4_BETTER PREPARED 9_EQUAL 1_LESS PREPARED
Please rate your overall satisfaction with the program. <u>8</u> Very Satisfied <u>5</u> Satisfied <u>1</u> Dissatisfied <u>Very Dissatisfied</u>
10. Are you working toward an advanced degree or certification?
_6_BSNMSNDoctorateCertificationOther (specify)
11. In retrospect, how valuable to your education were the HESI Exams? 4 Very Valuable 6 Valuable 4 No Value
12. What do you remember about your education at ECC Nursing program as an area of strength or weaknesses in your preparation for professional practice?  See attached
13. Do you have any suggestions for improving the ECC Nursing Program?  See attached
14. Would you be interested in receiving an alumnae newsletter from ECC Nursing Program? 9 YES 5 NO
15. If ECC Nursing Program formed an alumnae association, would you be interested in participating? 9 YES 4 NO

#### Summary

#### 2010 Graduates

- 12. What do you remember about your education at ECC Nursing program as an area of strength or weaknesses in your preparation for professional practice?
  - Well-rounded program with experienced educators who were always willing to help students
  - Review sessions were valuable
  - Taught me to think critically and helped me to prioritize
  - Excellent teachers
  - Easy access to instructors
  - Computerized testing was good practice for boards
  - Instructors very knowledgeable and pushed students to their maximum capabilities
  - Very comprehensive compared to BSN programs
- 13. Do you have any suggestions for improving the ECC Nursing Program?
  - Make it better by making it bigger more faculty for East Central = more RN's from East Central!
  - Possibly have Trends focus more on job preparedness.
  - More clinical time
  - Provide students with Xanax ASAP and Margaritas are encouraged after exams
  - Too much focus on care plans
  - More communication between Union/Rolla

#### Assessment/Program Evaluation

Several of the suggestions for improvement were made by students in either the program evaluation survey at graduation or in student evaluations. The department has addressed several of these issues in program improvement activities over the last year.

- 1. We have added a LPN to RN Bridge Program at the Union campus that will accept up to 16 additional students starting in January 2012.
- 2. Effective in Spring 2011, we have added a guest speaker in Nursing Trends that hires new graduates. The initial feedback was very positive from current students. The focus is on the hiring process, interviewing skills, and transition from school to work issues.
- 3. We currently have more than required clinical hours in the curriculum.
- 4. While the graduate comments regarding Xanax may appear in jest, we recognize that anxiety exists with nursing students. Examinations are particularly stressful as they make up 100% of the course grade in most instances. We have offered additional sessions for the Test Taking Strategy workshop last year and have included information regarding the Learning Center resources in our Nursing Student Handbook.
- 5. The faculty just completed major curriculum revisions involving clinical documentation, careplan and concept mapping. The focus will shift from the process of writing careplans to the process of promoting critical thinking in utilizing a concept map.
- 6. Nursing faculty meetings have been combined (Union and Rolla faculty) for just six months. Two curriculum meetings per semester are also combined. This effort has increased overall communication and collegiality.

#### **Program Assessment**

**Division: Allied Health** 

Department: Radiography at the Rolla Campus

Reporting Period: End of Program – Graduates April 2011

Reporting Date: July 1, 2011

Assessment Measure: American Registry of Radiologic Technologists exam

Credentials RT(R) Registered Technologist - Radiography

Graduates have the following curriculum outcome measures:

- Facilitates development of critical thinking and problem solving skills
- Creates an appreciation for the importance of professionalism and professional growth in a radiography career.
- Enables attainment of the knowledge and skills appropriate for an entry-level radiographer.
- Promotes graduates becoming members of the health care team.

These outcome measures are assessed at various points during the curriculum in a formative process. Graduates are assessed in a summative nature when they sit for the ARRT comprehensive examination. Successful completion of the examination is required to enter the profession as a Registered Technologist in Radiography.

- 14 radiography graduates
- 14 tested
- 13 pass
- 1 fail passed on second attempt

2011 Program Pass rate: \*92.8% Average Score 88%

2010 National Pass rate: \*92.6% Average Score 84%

All students have now passed. 2011 pass rate 100%.

The results were reviewed in the Total Program Evaluation. There were no significant changes to the curriculum or student services

Submitted by:

Maggie Ogden, Program Director Radiologic Technology Program

<sup>\*</sup>First-time testing results

### Division Report

### Career and Technical Programs

Hospitality Management/Culinary Arts Industrial Engineering Technology Precision Machining

#### **Annual Institutional Career & Technical Assessment Report**

East Central College Culinary Arts Program
Submitted by:
Chef Ted Hirschi, Program Coordinator
Chef Carla Derakshan, Culinary Instructor

#### **Primary Assessment for Student Learning**

The primary assessment for our graduating students in skills and concept learning in the culinary program are derived through our Practical and Written exams in HM2231 Culinary Arts Comprehensive. As a requirement of our accreditation through the American Culinary Federation the two exams detail specific task/skill learning in areas of cooking and support theory. Through the practical portion of the test, students are evaluated on their ability to correctly demonstrate six techniques of cooking and all of the sanitation and organization expected with standards taught in the program. The written portion of the exam evaluates learning in areas of theory and fact understanding. Students must pass both segments to qualify for graduation.

Additional assessment is applied through the Workkeys testing. Results are set against other culinary arts programs nationally for positioning of student learning.

#### **Summary of Student Assessment for Graduating Class of Spring 2011**

The comprehensive exams were taken by seven students that were finishing their program courses. Of the seven, five passed the practical portion and of those five, four passed the written. Of the four that completed the comprehensive successfully three have also completed their general education requirements and have earned their AAS degree. Students completing the skills assessment portion have demonstrated knowledge and ability to function as a line cook (hot or cold foods) in most professional culinary kitchens.

Regarding the Workkeys standing of the graduates, they are positioned to qualify for 65% of the jobs listed by the ACT-Workkeys organization in the foodservice industry.

#### **Observations on Student Performance in Assessment:**

The Workkeys shows above average readiness of the graduates to be successful in a variety of food industry fields. The more important comprehensive testing in practical and written show those students that passed and graduated from the program have a dominance of basic culinary skills and theory needed in local and national kitchen jobs. The employment of these students verifies this assessment with all four students fully employed in the foodservice industry.

#### **Areas Shown to Emphasize or Modify**

During the comprehensive exam it was observed that students need to learn/demonstrate more of the details of culinary preparation. General concepts have been dominated but the timing and attention to basic details are not emphasized in their outcomes. Instructional elements are being put in place to highlight the need for full detail attention in all areas of culinary preparation and theory.

#### **Industrial Engineering Technology**

Program Instructor: Nathan Esbeck

#### Program Instructor's Summary of TSA Results-NOCTI

I am generally pleased with the results. Graduating students fared better than both their state and national counterparts in most all areas. Areas of particularly good performance were, understanding of alternating current and programmable control. These are areas that we focus on as a program and are skills in strong demand in our area.

#### Areas of Weakness or Areas of Improvement

Our poor performance on the couplings section of the test indicates that more time should be devoted to couplings in the Maintenance Practices course. Coupling is the last topic to be covered in the course and may be cut short due to time constraints. In the future, I would like to reduce the number of gear labs and add coupling labs to enhance the student's understanding of the subject. Given the emphasis on Industrial Power Systems material, it is possible that that course could be increased in credit hours or split into pneumatics and hydraulics to cover the material more thoroughly.

#### Observations of Assessment

Some areas of assessment are not included in our curriculum. We do not cover anything relating to lighting so performance on the Transformers and lighting section was expectedly poor. Additionally, the assessment focuses on material from some courses more than others. For example, four of the 13 sections (Centrifugal Pumps, Hydraulics, Fluid Power and Pneumatics) are covered exclusively in the Industrial Power Systems class and no material from Materials and Processes, Machine Tool, Manufacturing Processes, HVAC or Industrial Computer Systems seems to be covered by the test.

#### **NOCTI Results- Master Machine Repair 0649 V1**

\*please note- Each set of data represents students tested at three separate times during the Academic Year 2010-2011 because the program exit dates varied.

#### **Analysis of Scores**

Site: East Central College - 6358

Test Date: 12/09/2010

	Master Machine Repair - 0649 v1								
Duty #	Written - Cognitive	Group	Site(Cumulative)	State	Nation	Criterion- Referenced CutScore	Standard Deviation	Standard Error of Measurement	
	Duty Description N=	5	48	48	78			782.02	
1	Couplings	56.7	54.9	54.9	56.3		16.2	5.1	
2	Centrifugal Pumps	90.0	80.7	80.7	80.1		20.4	6.5	
3	Hydraulics	57.4	55.3	55.3	57.9		12.2	3.9	
4	Fluid Power	60.0	52.5	52.5	56.8		16.7	5.3	
5	Pneumatics	70.0	72.2	72.2	71.5		16.4	5.2	
6	Control	55.0	54.9	54.9	58.3		24.5	7.7	
7	Motor Controls	72.9	66.9	66.9	65.2		15.1	4.8	
8	Symbols	66.2	70.7	70.7	68.8		17.2	5.4	
9	Transformers & Lighting	51.1	47.7	47.7	50.6		18.0	5.7	
10	Alternating Current	71.1	66.9	66.9	70.1		15.8	5.0	
11	Direct Current	66.2	56.6	56.6	56.8		20.5	6.5	
12	Programmable Controller	60.0	60.4	60.4	59.7		16.6	5.2	
13	National Electric Code	68.6	58.6	58.6	59.9		19.0	6.0	
Contract	Total	64.0	60.9	60.9	61.8	N/A	11.1	3.5	

#### **Analysis of Scores**

Site: East Central College - 6358

Test Date: 04/20/2011

	Master Machine Rep	air - 064	9 v1					
puty #	Written - Cognitive	Group	Ste(Cumulative)	State	Nation	Criterion- Referenced CutScom	Standard Deviation	Standard Error of Measurement
	Duty Description N=		48	48	78			
1	Couplings	33.3	54.9	54.9	56.3		16.2	5.1
2	Centrifugal Pumps	100.0	80.7	80.7	80.1		20.4	6.5
3	Hydraulics	60.9	55.3	55.3	57.9		12.2	3.9
4	Fluid Power	60.0	52.5	52.5	56.8		16.7	5.3
5	Pneumatics	66.7	72.2	72.2	71.5		16.4	5.2
6	Control	75.0	54.9	54.9	58.3		24.5	7.7
7	Motor Controls	52.9	66.9	66.9	65.2		15.1	4.8
8	Symbols	92.3	70.7	70.7	68.8		17.2	5.4
9	Transformers & Lighting	33.3	47.7	47.7	50.6		18.0	5.7
10	Alternating Current	77.8	66.9	66.9	70.1		15.8	5.0
11	Direct Current	61.5	56.6	56.6	56.8		20.5	6.5
12	Programmable Controller	78.6	60.4	60.4	59.7		16.6	5.2
13	National Electric Code	85.7	58.6	58.6	59.9		19.0	6.0
	Total	66.2	60.9	60.9	61.8	N/A	11.1	3.5

#### **Analysis of Scores**

Site: East Central College - 6358

Test Date: 05/10/2011

	Master Machine Repair - 0649 v1								
Duty #	Written - Cognitive	Group	Site(Cumdative)	State	Nation	Criterion- Referenced CutScore	Standard Deviation	Standard Error of Measurement	
	Duty Description N=	2	2	2	235				
1	Couplings	33.3	33.3	33.3	55.3		18.4	5.8	
2	Centrifugal Pumps	75.0	75.0	75.0	78.1		21.6	6.8	
3	Hydraulics	52.2	52.2	52.2	54.5		13.2	4.2	
4	Fluid Power	60.0	60.0	60.0	51.7		17.2	5.4	
5	Pneumatics	62.5	62.5	62.5	67.1		17.2	5.4	
6	Control	62.5	62.5	62.5	56.8		26.8	8.5	
7	Motor Controls	67.7	67.7	67.7	64.7		17.6	5.6	
8	Symbols	80.8	80.8	80.8	58.4		20.0	6.3	
9	Transformers & Lighting	38.9	38.9	38.9	46.4		20.2	6.4	
10	Alternating Current	77.8	77.8	77.8	69.7		16.8	5.3	
11	Direct Current	65.4	65.4	65.4	52.9		19.7	6.2	
12	Programmable Controller	67.9	67.9	67.9	57.9		16.5	5.2	
13	National Electric Code	78.6	78.6	78.6	56.3		18.3	5.8	
argariti.	Total	63.1	63.1	63.1	58.4	N/A	11.8	3.7	

#### Short Description of Workkeys Results:

All the students taking the Workkeys test scored either Gold or Silver (5 gold, 4 silver). Overall the weakest was the Locating Information section. I worked some sample problems myself to see what the section tested. It seems to test assimilation of provided information and the ability to read charts of various types. The program incorporates significant cart reading and interpolations so I'm not sure how we can improve the results in this area other than additional practice.

#### **Workkeys Results**

award	major	Math	Locating Info	Reading	Career Readiness	
2 Yr. Cert.	INDUSTRIAL ENGR. TECH.	6	5	5	GOLD	
AAS	INDUSTRIAL ENGR. TECH.	6	5	7	GOLD	
AAS	INDUSTRIAL ENGR. TECH.	7	5	7	GOLD	
Cert. Of Achievement	INDUSTRIAL ENGR. TECH.	7	5	5	GOLD	
Cert. of Specialization	WATER/WASTEWATER OPERATIONS	6	5	5	GOLD	
AAS	INDUSTRIAL ENGR. TECH.	5	4	6	SILVER	
AAS	INDUSTRIAL ENGR. TECH.	6	4	5	SILVER	
Cert. Of Achievement	INDUSTRIAL ENGR. TECH.	6	4	4	SILVER	
Cert. of Specialization	INDUSTRIAL ENGR. TECH.	6	4	5	SILVER	

<sup>\*</sup> Bronze – scores at least a level 3 in each of the three core areas and has the necessary foundational skills for 35 percent of the jobs in the WorkKeys database.

<sup>\*</sup> Gold – scores at least a level 5 in each of the three core areas and has the necessary foundational skills for 90 percent of the jobs in the WorkKeys database.

· ·			
Note: Data are for AY 2010-2011 graduates with a WorkKeys score			

<sup>\*</sup> Silver – scores at least a level 4 in each of the three core areas and has the necessary foundational skills for 65 percent of the jobs in the WorkKeys database.

#### **Precision Machining Department Report**

Submitted By Curtis Elliott

#### **Precision Machining Technology**

The Precision Machining Department comprises of the following academic objectives; organization and shop practices, measurement and inspection, metallurgical processes and heat treating, blueprint interpretation and process planning, layout and bench work, band saw machines, drill presses, manual lathes, vertical milling machines, precision grinding machines, computer numerical control programming, preparation, operating, computer numerical control programming, and using a computer aided drafting and computer aided machining systems.

These Objectives are assessed at various points in the program using the National Institute of Metal Working Skills, or NIMS, curriculum in a formative process for Technical Skill Assessments. The measured outcomes of these assessments are in line with our NIMS accreditation.

#### **Specific Course Descriptions/Curriculum**

#### **NIMS Machining Level One and Two**

#### 1. Measurement, Materials and Safety

- Module 1: Identify and Demonstrate Usage of Machine safety and Personal Protective Equipment.
- Module 2: Demonstrate Compliance with Lock-out/Tag-out Procedures and OSHA Requirements and Guidelines.
- Module 3: Hazardous Materials Handing and Storage Including EPA, HAZMAT OSHA.
- Module 4: Part Inspection.
- Module 5 & 6: Process Control and Process Adjustment (2 Performance Objectives)
- Module 7: Participation in Process Improvement
- Module 23: General Housekeeping and Maintenance
- Module 24: Preventive Maintenance-Machine Tools
- Module 25: Tooling Maintenance

#### 2. Job Planning, Benchwork and Layout

- Module 8: Manual Operations: Layout (2 Performance Objectives)
- Module 9: Manual Operations: Benchwork (7 Performance Objectives)
- Module 10: Sawing (5 Performance Objectives)
- Module 11: Job Process Planning (4 Performance Objectives)

#### 3. Manual Turning – Turning Between Centers

Modules 13 & 14: Turning Operations: Turning Between Centers – (10 Performance Objectives)
(MET and TEC reviews)

#### 4. Manual Turning – Chucking

Modules 15 & 16: Turning Operations: Chucking – (9 Performance Objectives) (MET and TEC reviews)

#### 5. Manual Milling

Module 17: Milling: Square up a Block – (4 Performance Objectives)

Module 18 & 19: Manual Milling: Vertical and Horizontal – (12 Performance Objectives)

(MET and TEC reviews)

#### 6. **Drill Press Operations**

Module 12: Drilling Operations – (5 Performance Objectives)

#### 7. Surface Grinding

Module 20: Surface Grinding: Grinding Wheel Safety – ( 3 Performance Objectives)

Module 21 & 22: Surface Grinding, Horizontal Spindle, Reciprocating Table – (8 Performance Objectives)

#### 8. Introduction to CNC

Module 26: CNC Basic Programming – (5 performance Objectives)

#### 9. CNC Milling

Module 27: Principles of Three-Dimensional Coordinate Planes in the simple Program – (5 Performance Objective)

#### 10. CNC: Write Simple CNC Program and Review Tool Path

Module 28: Write Simple CNC Program and Review Tool Path – (6 Performance Objectives)

#### 11. CNC: Operating A CNC Milling Machine

Module 29: Operate a CNC Milling Machine – (8 Performance Objectives) (MET and TEC review)

#### 12. CNC Turning

Module 30: Write Program for a CNC Lathe

Module 31: Operate a CNC Lathe – (6 Performance Objectives) (MET and TEC review)

#### 13. EDM – Plunge EDM

Module 32: Produce an Electrode and Operate a Plunge Electric Discharge Machine – (2 Performance Objectives) (MET and TEC review)

#### 14. EDM – Five Axis Wire EDM

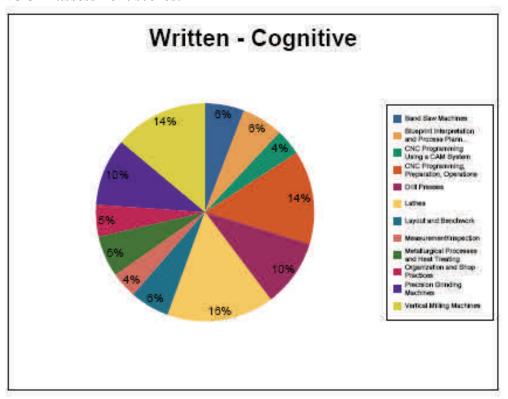
Module 33: Program and Operate a Five Axis Wire Electric Discharge Machine (1 Performance Objective) (Met and TEC review)

Seven of the May 2011 graduates passed a NOCTI test as an exit exam, exceeding the National average percentage of 72.3% and State average of 74.2%. The May 2011 graduates had a average score of 87.1% as a group. These results were viewed as a total program evaluation.

Graduates also take the WorkKeys test; which encompasses reading for information, locating information and applied mathematics, upon exit of the program.

The program also keeps an active advisory board consisting of members in industry that meets at a minimum twice a year. Individual members include business owners and various industry professionals. This team of individuals plays a key role in developing program objectives based on current expectations of the local industry community from a graduate of our AAS program. This in turn provides a tool to assess the overall health and strength of the program.

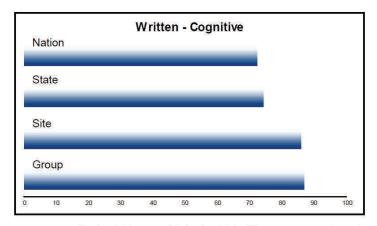
#### **NOCTI** assessment scores:



Site: East Central College - 6358

Test Date: 05/11/2011

	Precision Machining	- 4052	2 v1					
Duty #	Written - Cognitive	Group	Site(Cumulative)	State	Nation	Criterion- Referenced CutScore	Standard Deviation	Standard Error of Measurement
	Duty Description N=	5	7	65	291			
1	Organization and Shop Practices	94.7	94.3	85.7	85.6		8.5	2.7
2	Measurement and Inspection	88.0	87.1	74.9	72.0		15.4	4.9
3	Metallurgical Processes and Heat Treating	91.7	88.1	77.8	73.5		17.7	5.6
4	Blueprint Interpretation and Process Planning	86.0	81.4	67.5	66.8		20.6	6.5
5	Layout and Benchwork	88.6	86.7	73.5	71.1		18.2	5.8
6	Band Saw Machines	93.3	93.7	74.4	73.0		19.0	6.0
7	Lathes	92.1	90.0	73.8	73.3		15.9	5.0
8	Milling Machines	83.2	82.3	71.8	70.1	-	17.3	5.5
9	Surface Grinder	72.0	70.0	66.0	61.6		23.2	7.3
10	Computer Numerical Control (CNC) Programming, Prepara	72.7	80.5	75.0	71.5		21.4	6.8
	Total	87.1	86.1	74.2	72.3	54.6	13.4	4.2



Scoring data is accumulated and maintained for every assessment scored, and cumulative averages are provided for most test admit Score reports for pre-tests, pilot tests, and newly released tests do not include cumulative averages or comparative data. Averages a at four levels (group, site, state, and nation). State and nation averages are computed twice a year (January and July); a cumulative averages are the site level. A detailed score interpretation report is available at the Client Services Center.

#### **WORK KEY GROUP RESULTS AY2010/2011**

award	major	Math	Locating Info	Reading	Career Readiness
2 Yr. Cert.	PRECISION MACHINING	6	4	5	SILVER
Cert. Of Achievement	PRECISION MACHINING	6	4	6	SILVER
* Bronze – scores at le	east a level 3 in each of the three core	areas	and has	the neces	sary founda

- \* Bronze scores at least a level 3 in each of the three core areas and has the necessary foundational skills for 35 percent of the jobs in the WorkKeys database.
- \* Silver scores at least a level 4 in each of the three core areas and has the necessary foundational skills for 65 percent of the jobs in the WorkKeys database.
- \* Gold scores at least a level 5 in each of the three core areas and has the necessary foundational skills for 90 percent of the jobs in the WorkKeys database.

Note: Date was face AV 2000 2000 and and a state with a Washington			
Note: Data are for AY 2010-2011 graduates with a WorkKeys score			

# Division Report

# Business, Education and Social Science

#### **Accounting Department Results**

Submitted by Dan Hall

#### East Central College Assessment Reporting: Course/Curriculum

Division: Education and Social Science

Course/Curriculum Name: Accounting Program/Managerial Accounting

#### **PLANNING**

#### **Intended Program Outcome**

- To prepare students that are attaining or upgrading job-related skills in the business environment.
- To prepare students to enter into a new vocation or complement their present vocation.
- Prepare students for subsequent transfer to a 4-year university to seek a baccalaureate degree.

#### Goals

- Students should be able to describe business organizations.
- Students should be able to apply the fundamental accounting equation (A=L+OE) in the analysis and recording of business transactions.
- Students should be able to describe and implement the major components of an accounting informational system.
- Students should be able to understand the fundamental state and federal payroll tax laws and principles and be able to properly record payroll transactions.
- Students should understand the fundamental tax laws and principles underlying the preparation of individual income tax returns, and be able to discuss basic tax research and tax planning procedures.
- Students should understand the fundamental accounting concepts underlying the preparation of basic financial statements.
- Students should appreciate the role of technology in the accounting information processing cycle.
- Students should develop a professional orientation toward the practice of accounting.
- Students should be able to identify uses of accounting data by managers in directing the affairs of business.

#### **Means of Assessment**

- Pretest/Posttest including NOCTI (national standardized test)
- Case Studies
- Practice Sets
- Computer Software--
- QuickBooks
- Course objectives compared to overall core program objectives

#### **Defined/Established Criteria**

• Students will achieve 80% of program goals and objectives

#### **ANALYSIS**

#### **Summary of Data Collected**

- In the Fall '10, the third phase of the Financial Accounting series was developed for the Managerial Accounting course to be implemented in the Fall of 2010. The pre-test and post-test assessment instrument was developed and administered to all Managerial Accounting classes in the Fall 2010 semester. The assessment questions were given in a pre-test and embedded in the comprehensive final at the end of the semester. The plan calls for the collection of data for two years. This report represents the results of the first year of the collection cycle for this course.
- Data currently under review indicates that the overall score related to the post-test assessment objectives was 66% for Fall 2010.

Analysis of student responses from the Fall 2010 assessment instrument indicate that students had significant difficulty with question numbers 8,10,11, and 14. The results of this analysis were not surprising given the information in this course is new to all students taking Managerial Accounting. However, it is noteworthy to mention that the student's performance between the pre-test and post-test increased by 30 %. The questions that students had difficulty with stem from the use of new terminology rather than accounting principles. More emphasis will be placed in the lecture period on vocabulary and terminology.

A nationalized test was given (NOCTI) to recent accounting graduates. The test measured the following topic areas: Journalizing, Posting, Payroll Preparation, Banking and banking procedures, Merchandise Inventory, Completion of accounting cycle, Locating source data, Mechanical and electronic accounting devices.

An analysis of the NOCTI results show the national average score is 68. All of our graduates taking the test scored above the national average. The overall score for our graduates is 78.4.

#### New Strategies/Adjustments to Course/Program

- Data is now currently under review.
- Managerial Accounting pre-tests and post-tests will be given in Fall 2011 and Spring 2012.
- Continue to review curriculum content, develop and implement new teaching strategies.

The topic area of the graduate score's will be reviewed to determine what changes may need to be made to the accounting curriculum content.

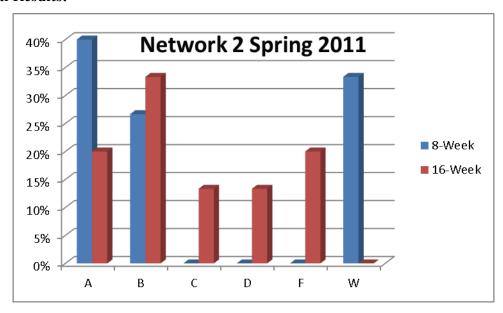
Division: Education, Business, and Social Science Department: Computer Information Systems Reported by Judy Cook and Diane Pellin

Course: Spring 2011 CS1163 Network 2

#### **Learning Activity/Experience:**

- The Spring 2011 CS1163 Network 2 class was offered in two formats:
  - A 16-week one night a week section
  - An 8-week two times a week day section
- The 8-week section offered Network 1 in the first 8-weeks of the semester, followed by Network 2 in the second 8-weeks of the semester. This allowed students who enrolled in the Spring semester as a first-semester student to accomplish both Network 1 & Network 2 so that the following Fall semester they could enroll in the Network 3 class. Without the 8-week Network 1 & Network 2 option, students who are Spring semester first-time students would have to wait until the next Fall semester to begin their 4-course Network sequence.

#### **Actual Results:**



#### **Relative Information Learned:**

- 67% of the students earned A, B, or C grades in both the 8-week and 16-week sections.
- 40% in the 8-week section earned an A, while 20% in the 16-week section earned an A The 16-week section had a distribution of Ds and Fs, while the 8-week section students chose to withdraw.

#### **New Strategy:**

• It appears that the pace of the 8-week section either appealed to the students as demonstrated by the 40% A grade or overwhelmed the students as indicted by the 33% withdrawals. However, there was a consistent success of 67% when combining the As, Bs, and Cs, of both sections. Question: Was the 40% A grades in the 8-week section based on the willingness of the student to step up and handle the faster pace of the class?

- Analysis of the CIS Network Computer Lab sign-in sheets also supports the higher grades of the 8-week section. These students spent time in the CIS Network lab using the resources with the support of the lab assistant.
- The instructor will implement the Packet Tracer tool which the students can use at home or in the computer lab. This tool simulates a computer network without the physical devices so provides flexibility and practice to the students to work through various lab scenarios.

#### **TSA Network Courses CISCO Academy**

Summer 2010, Fall 2010, and Spring 2011					
AAS Computer Information Systems	10 pass				
Certificate CIS Network Technician	2 pass				

Cisco Networking Academy is a global education program that teaches students how to design, build, troubleshoot, and secure computer networks for increased access to career and economic opportunities in communities around the world. Networking Academy provides online courses, interactive tools, and hands-on learning activities to help individuals prepare for ICT and networking careers in virtually every type of industry. The Networking Academy delivers a comprehensive, 21st century learning experience to help students develop the foundational ICT skills needed to design, build, and manage networks, along with career skills such as problem solving, collaboration, and critical thinking. Students complete hands-on learning activities and network simulations to develop practical skills that will help them fill a growing need for networking professionals around the world.

Students in the Computer Information Systems program take 4 Network CCNA courses. During these four courses, they must successfully complete the final objective exam and hands-on skills test for each Network class before enrolling in the next Network course in the sequence. The curriculum is controlled by CISCO Network Academy. This exit exam is recognized as a program-level accomplishment for our graduating students.

#### East Central College Education Department Early Childhood Education AAS Degree Assessment Report 2010-11

#### Mission

The mission of the Education Department of East Central College is to be a teaching and learning community committed to providing educational experiences in partnership with the learning community that prepares students with the knowledge base and specialized skills to become an effective practitioner.

#### **East Central College- Common Learning Objectives:**

- 1. Ethics & Social Responsibility
- 2. Communication
- 3. Creative/Critical Thinking

#### **Program Goals:**

The goal of the East Central College Education Department is to provide each graduate with an education characterized by knowledge, reflection, inquiry, service to community, respect for diversity and active learning. The program's outcomes are stated in the program below.

#### <u>CDA</u>

Upon completion of the coursework for a CDA students will be able to demonstrate knowledge of:

- 1. Planning a safe, healthy, learning environment.
- 2. Steps to advance children's physical and intellectual development.
- 3. Positive ways to support children's social and emotional development.
- 4. Strategies to establish productive relationships with families.
- 5. Strategies to manage an effective program operation.
- 6. Maintaining a commitment to professionalism.
- 7. Observing and recording children's behavior.
- 8. Principles of child growth and development.

#### **Early Childhood AAS Degree**

Upon completion of the coursework for an Early Childhood AAS Degree students will be able to demonstrate knowledge of:

#### 1. Promoting Child Development and Learning

- a. Knowing and understanding young children's characteristics and needs
- **b.** Knowing and understanding the multiple influences on development and learning
- **c.** Using developmental knowledge to create healthy, respectful, supportive, and challenging learning environments

#### 2. Building Family and Community Relationships

**a.** Knowing about and understanding family and community characteristics

**b.** Supporting and empowering families and communities through respectful, reciprocal relationships

c. Involving families and communities in their children's development and learning

#### 3. Observing, Documenting, and Assessing to Support Young Children and Families

- **a.** Understanding the goals, benefits, and uses of assessment
- **b.** Knowing about and using observation, documentation, and other appropriate assessment tools and approaches
- c. Understanding and practicing responsible assessment
- **d.** Knowing about assessment partnerships with families and other professionals

#### 4. Teaching and Learning

- a. Knowing, understanding, and using positive relationships and supportive interactions
- **b.** Knowing, understanding, and using effective approaches, strategies, and tools for early education
- c. Knowing and understanding the importance, central concepts, inquiry tools, and structures of content areas or academic disciplines
- **d.** Using own knowledge and other resources to design, implement, and evaluate meaningful, challenging curriculum to promote positive outcomes

#### 5. Becoming a Professional

- **a**. Identifying and involving oneself with the early childhood field
- b. Knowing about and upholding ethical standards and other professional guidelines
- c. Engaging in continuous, collaborative learning to inform practice
- d. Integrating knowledgeable, reflective, and critical perspectives on early education
- e. Engaging in informed advocacy for children and the profession

**Pre-Assessment:** Students will take a survey during the first month of class in the following Early Childhood courses: ED1053, ED 1153 & ED1253. This survey will cover the program goals and the CDA goals.

#### **Grade Point Average Data Results**

GPA of 2009 - 2010 AAT Graduates		
	n	Avg. GPA
2010-11 EC AAS Graduates	2	3.19

#### **Program Completion/ Graduation Rates:**

	ED 2003 Student Retention & Success in ED 2451	
Column		n
1	Total EC AAS Majors	91
2	Average GPA for EC AAS Majors	2.41
3	Total Graduates 2010-11	2
4	Graduation Rate (percentage)	2.2

Note: It is noted this is a low completion rate for number of EC AAS majors. This is attributed to the recent influx of AAS Majors due to program entry requirements for the AAT program as well as recent changes in the economy. This rate will be monitored for improvement.

#### **Summative Assessment**

• At the end of their AAS degree students will develop a written portfolio which speaks to all of the program goals. The student's CDA Resource Collection will be included in their portfolio. Students will also be required to do a formal oral presentation on their understanding of the goals of the program.

Both graduates completed an oral presentation focusing on the program goals and NAEYC standards. Both students received an average score of 90% or above using a rubric scored by 3 or more faculty members demonstrating competence of the program goals.

 At the completion of their coursework students will produce their CDA Resource collection for review and complete a competency observation from an Early Childhood Instructor (CDA Observation Tool).

Students in ED 1053, 1153 and 1253 complete the resource file as well as write to the 12 competencies for the CDA program. Those are graded by a common scoring rubric created by the early childhood faculty members.

• Rubrics for the CDA Resource collection are located in Appendix A. Rubrics for reflective statements of competency for the program goals are located in Appendix B. The oral presentation rubric can be found in Appendix C.

Both graduates completed an oral presentation focusing on the program goals and NAEYC standards. Both students received an average score of 90% or above using a rubric scored by 3 or more faculty members demonstrating competence of the program goals.

• Academic skills will be measured through use of Work Keys testing. Students will be measured according to the skill levels required by their program.

Work Keys results pending

• Students will be measured by use of NOCTI's Assessment Blueprint of Education and Training, in the area of Early Childhood Care and Education.

EC AAS Graduate NOCTI Results 2010-11				
Column		n		
1	Total EC AAS Majors	2		
2	Average GPA for EC AAS Majors	90.3		
3	State Average	88.3		
4	National Average	83.3		

The subgroup scores were analyzed noting several areas of program strengths (average score above 90<sup>th</sup> percentile): Professionalism, Health and Safety, Physical Development, Inclusion of Children with Special Needs, Positive Relationships with Families.

Students scored below the 75<sup>th</sup> percentile, noted as areas to improve the program include: Observation of Documentation and Learning and Culturally Relevant Care and Education.

• Common assessments are given at the completion of all education courses and reviewed on a three year cycle.

Review of the final assessment for ED 1253 was completed and a new final and scoring guide were completed and piloted in Summer 2011 (Results and changes pending further evaluation and analysis of data).

All full-time and adjunct faculty will use common course syllabi and will review assessment data, including this plan on a continual basis with the Education Coordinator.

#### Departments of History and Political Science Assessment Report Summer 2011

#### **Purpose**

For the 2010-11 academic year, the full-time History and Political Science faculty set up a new online study module as a means of assessing student competency in fulfilling the Missouri state statute requirement that all students must demonstrate a knowledge of the provisions of the United States and Missouri constitutions by passing an examination on the documents before they can graduate. This module, listed as **HI 1000/PS 1000 -- "Constitutions Study Module"** consists of text and video links, practice quizzes and excerpts from material presented in our regular History and Political Science course offerings, particularly PS 1203: Introduction to U.S. Government and PS 1303: State and Local Government to help students prepare for two 100-question multiple choice exams contained within the website, one on the U.S. Constitution and one on the Missouri State Constitution. It was the hope of department faculty that students would meet their state competency requirement by working at their own pace in this self-directed online module, freeing faculty to devote time previously spent in preparing for the constitutions exam on other topics.

#### Plan

Students enrolling in their first History or Political Science course at ECC are required to also register for HI 1000/PS 1000, which is listed as a zero credit hour course and is graded on a "Pass/Fail" basis. To meet the state requirement, students must attain at least a 70 percent grade (70/100) on each of the two exams. Students can take the exams as often as needed to pass; each exam is subdivided into three sections of 33-34 questions each with a time limit for completion. Individual instructors are free to set the opening and closing dates for the module exams, and may reward students who do better than the minimum 70 percent grade by awarding extra credit points in the regular course associated with the module. Regular faculty were to explain the process to adjunct and dual-credit instructors and collect data on pass/fail rates at the end of the school year to assess the effectiveness of the module as compared to previous paper versions of the exam.

#### Method

During the registration process, students registering for any of the History or Political Science core courses – History 1103: U.S. History to 1877, HI 1203: U.S. History Since 1877, PS 1103: Introduction to Political Science, or PS 1203: Intro to U.S. Government who had not previously fulfilled the constitutions competency requirement were also registered in a corresponding HI 1000/PS 1000 constitutions module. Students who had fulfilled the requirement prior to Fall 2010, or any student taking a second core course in Spring 2011 were exempt from the module requirement provided they had met the requirement earlier.

Most instructors opened the module at the time the regular course commenced. Closing dates for the module varied by instructor and circumstance (some dual-credit courses taught at area high schools have semesters which end after the end of classes at ECC). A few instructors at schools

where computer access is problematic continued to use a paper version of the exams from the online module, or other methods of assessing competency.

The new module was not universally implemented by all instructors in Fall 2010, and some confusion evidently remained among students and some instructors on the purpose and impact on grades of the module. This was borne out in a preliminary look at the Fall 2010 data, in which there was some disparity in pass/fail rates between sites and instructors, and not a few questions remaining among the part-time faculty. A meeting was held during in-service week prior to the Spring 2011 semester in order to clarify the module requirements. Data from Spring 2011 and particularly from Summer 2011 show an improved pass/fail rate.

#### Data

Data provided by the ECC Office of Institutional Research gave pass/fail rates for students in individual course sections of HI 1103 and HI 1203 and PS 1203. PS 1103: Intro to Political Science was not taught during 2010-11, but one section of a new course, PS 1303: State and Local Government was scheduled in Fall 2010 and is included in the results. Pass/Fail data was divided into the following categories for comparison.

- All Students 2010-11
- All Students Fall 2010
- All Students Spring 2011
- All Students Summer 2011
- All History Students 2010-11
- All History Students Fall 2010
- All History Students Spring 2011
- All History Students Summer 2011
- All Political Science Students 2010-11
- All Political Science Students Fall 2010
- All Political Science Students Spring 2011
- All Political Science Students Summer 2011
- All Students 2010-11 taught by Full-Time Faculty
- All Students 2010-11 taught by Part-Time Faculty
- All Students Fall 2010 taught by Full-Time Faculty
- All Students Fall 2010 taught by Part-Time Faculty
- All Students Spring 2011 taught by Full-Time Faculty
- All Students Spring 2011 taught by Part-Time Faculty
- All Students Summer 2011 taught by Full-Time Faculty
- All Students Summer 2011 taught by Part-Time Faculty
- All Students taught on ECC Main Campus (Union) 2010-11
- All Students taught at ECC Rolla 2010-11
- All Students taught at ECC Sullivan 2010-11
- All Students taught at ECC Washington 2010-11
- All Students taught in Dual-Credit Classes 2010-11
- All Students taught in totally Online Classes 2010-11
- All Students taught in Hybrid Classes 2010-11

#### A Note on Data

Although it is possible to further segregate data according to each instructor, such a comparison would not provide any true baseline for implementation of the module, since some instructors are using paper versions of the exams and it was impossible to verify all the methods of examination used.

#### **Evaluation of Results**

It is worthwhile at this point to revisit data submitted in the 2010 Assessment Report – before the Constitutions Study Module was implemented. That data showed a **76 percent pass rate for Political Science students** and an **82 percent pass rate for History students** in data over three years (2007-10) for **1,048 students** in **40 course sections (28 Political Science and 12 History)** available when the report was prepared.

For 2010-11, data for **1,175 students** shows an overall **pass rate of 80 percent for all students**. Some 11 percent of ECC students failed to pass and another 9 percent withdrew without a grade. As would be expected in implementation of a new assessment method, the **pass rate increased** from Fall to Spring and peaked during the 2011 Summer Session. For Fall 2010 the pass rate for all students was 79 percent; this improved to 80 percent in Spring 2011 and reached 88 percent in Summer 2011.

There was a noticeable **difference between History and Political Science students**. Overall, History students had a pass rate of 84 percent, increasing from 80 percent in Fall 2010 to 86 percent in Spring 2011 and 91 percent in Summer 2011. Political Science students had a pass rate of 75 percent overall; 77 percent in Fall 2010, 72 percent in Spring 2011 and 85 percent in Summer 2011.

Whether the course was taught by **full-time or part-time faculty also made a difference.** The pass rate for full-time faculty was 78 percent overall, improving from 76 percent in Fall 2010 to 81 percent in Spring 2011 and 88 percent in Summer 2011. The pass rate for part-time faculty was 82 percent overall: 81 percent in Fall, 80 percent in Spring and 91 percent in Summer 2011.

By location, students on the main ECC campus in Union had an overall success rate of 80 percent; at Rolla, 73 percent; at Sullivan, 68 percent; at Washington, 92 percent; and at area high schools offering dual credit (Bourbon, Cuba, Rolla, St. Clair, Union and Washington, 95 percent overall.

In non-traditional formats/delivery systems, online students had a 94 percent success rate; students in hybrid classes an 88 percent pass rate.

#### **Attempts and Scores**

Using older methods, students averaged three attempts before the reached a passing score, with History students generally needing slightly fewer attempts to reach 70 percent. No easily translatable data is available for the Constitutions Study Module, as students are allowed an unlimited number of attempts – and a few students actually used the automatic grading feature of Moodle to check their answers on individual questions by logging into the exam to answer a

single question, then logging off to see if they got it right, which meant Moodle recorded hundreds of attempts for just a few students. Anecdotal information from students consistently rated the Missouri Exam as the more difficult of the two; student scores appear to reflect an average score on the U.S. Exam of 82, for the Missouri Exam a 78.

#### **Explanation of Results**

Clearly, as the students and instructors became more familiar with the Constitutions Study Module the higher the student pass rate. The overall success rate for 2010-11 was comparable to the previous methods of evaluation, which all involved paper tests, but the number of attempts was higher as the students could set their own pace and did not have to wait for instructors to complete grading each of their efforts to try again.

Variations in the pass rate from Fall to Spring generally reflect improvement; the slightly lower success rate for Political Science students in the Spring is likely attributable to staffing changes as a result of the unavailability of our full-time History instructor for Spring 2011 (on sabbatical), which meant there were fewer sections of Political Science taught and fewer by full-time faculty, as the full-time Political Science instructor was switched to teach primarily History sections. The very high success rate in Summer 2011 is likely due to two factors – smaller class sizes and many fewer sections, Only six History and two Political Science courses were scheduled in Summer 2011, with two fully online and two others being in a hybrid format. Students used to being in an online academic environment appear to have less difficulty completing the module in a timely manner.

Variations from Full-Time to Part-Time Faculty are most pronounced in the pass rates for dual-credit courses. Students receiving credit for ECC History and Political Science classes while attending high school benefit from daily interaction with their instructors and also tend to be among the most motivated of students. The course pre-requisite of completion of English Composition I with a passing grade before a student can enroll in a core History or Political Science course also accounts for both the higher number of students taking the courses in the Spring and the higher pass rate, as Spring Semester students are acclimated to college work and many General Studies or degree/certificate students wait until their final semester to fulfill the constitutions competency requirement – most students are on a schedule to graduate in May.

#### Some Areas for Future Study

There is room for improvement in several areas concerning further use of the Constitutions Study Module, although its implementation for the most part can be viewed as a success. As a means of making more efficient use of class time in the History and Political Science courses, the module has had a great and positive impact. As students and instructors become more familiar with the module it is expected that students will continue to show improvement, although a perfect pass rate is unrealistic given the busy lives many community college students lead. Pressures of work and family will always likely mean some students will be unable to complete their exams on time, while others will be forced by individual circumstances to withdraw. (It should be noted that students who complete the module exams DO receive credit for passing the module, even if they fail or do not complete the main course.)

Technical, aesthetic and security concerns will also likely have to be addressed as the module continues to be used. Technological advances should be incorporated to strengthen the way information is presented in the module, and the basic site might be more attractive for users. Adding additional questions to the test bank will also make the exam more difficult by providing randomly-selected questions.

The module presents a difficulty for assessment in that ECC is the only higher education institution in Missouri (or to our knowledge, any other state) using it, so there is no nationally-established norm for comparison. There has, however, been some interest in the module by other Missouri colleges and universities, as they all have struggled to meet the state requirement to test students' constitutional competency. With a bit more polish the module might be successfully marketed to other institutions.

Changes in the ECC History and Political Science curriculum may also affect the module success rate and certainly should boost enrollment in courses where being forced to complete the constitution requirement again was a deterrent (as it was under our old methods of assessment). With the division of the ECC U.S. History survey into three distinct courses instead of two and the more consistent scheduling of PS 1103 and PS 1303, ECC will offer six core courses tied to the module instead of four. Students wishing to take additional core courses or electives beyond the 1000 level will have to complete the competency exams only once.

Above all, continued successful use of the module will require continuous communication with our part-time instructors as new people are hired, and continuous explanation of the module's purpose for our students. As it continues to be used it will lend itself to continuous assessment and further improvement.

#### PE 1081 Intro to Fitness & Wellness Assessment Report

Spring 2011

Submitted by Jay Mehrhoff

The course objectives listed below were measured based on their meeting psychomotor, cognitive, and affective domain outcomes. A matrix was formed in table 1.0 to display measurement of the following objectives over the accepted outcomes according to the National Association of Sport and Physical Education. NASPE is an affiliated organization with the American Alliance of Health, Physical Education, Recreation and Dance. AAHPERD is the largest research based organization supporting resource for physical education, leisure, fitness, dance, health promotion, and education related to achieving a healthy lifestyle.

#### COURSE OBJECTIVES:

- 1. The student will understand the effects and benefits of muscular strength and endurance training on the body.
- 2. The student will understand the effects and benefits of cardiovascular training on the body.
- 3. The student will understand the principles of body composition and be able to monitor and determine healthy body composition levels.
- 4. The student will be able to distinguish acceptable stretching exercises which benefit flexibility.
- 5. The student will be able to compute their target heart rate and determine the proper intensity level and duration of a workout.
- 6. The student will compute their daily caloric intake and determine acceptable patterns of nutrition.
- 7. The student will understand the social and emotional benefits created through participating in physical activity.

Table 1.0

OBJ.	DOMAIN	CONTENT	GEN. ED. SKILL AREA	ASSESSMENT TOOL	MEASURE
1,2,4	Psychomotor	Cardiovascular endurance, muscular strength, flexibility		Physical Performance Pre- and Post Test	SPSS 14.0
1,2,3,4 ,5,6	Cognitive	Body functioning, body composition, nutrition concepts, health and wellness principles		Pre and Post Assessment Survey on Moodle, Fitness and Wellness Quizzes on Moodle	Moodle platform with results entered into SPSS 14.0
7	Affective	Self-confidence, value of physical activity, self- discipline, tension release, communication	Valuing	Pre and Post Assessment Survey on Moodle, Fitness and Wellness Quizzes on Moodle	Moodle platform with results entered into SPSS 14.0

#### **ASSESSMENT TO MEASURE OBJECTIVES:**

#### **OBJECTIVES 1, 2, 3, 4, 5**

The student will take a pre and post test which will measure their individual physical abilities/limitations before and after participating in a muscular strength, muscular endurance, flexibility and cardiovascular training program.

Scores from the pre and post test will be entered into a computer statistical package, SPSS 14.0. Measurement will be conducted to show levels of improvement for the class. Class instruction will be modified to meet the areas of deficiency for improvement in teaching methods and delivery.

#### **OBJECTIVES 1, 2, 3, 4, 5**

A developed pre and post assessment survey will cover content objectives through the Moodle platform. Course content cover the five components of physical activity will be measured from the beginning of the class to the end. Wellness components associated with nutrition and body composition will be measured through the Moodle quizzes as well. Results from the surveys will be entered into a computer statistical package, SPSS 14.0. Class instruction will be modified to meet the areas of deficiency for improvement in teaching methods and delivery.

#### **OBJECTIVE 3**

The student will take a pre and post test which will measure their individual body composition using the Tanita scale. The results will be recorded into Fitness Trac at the beginning and end of the semester to show progress. Results will be transferred to SPSS to levels of improvement of a given student population.

#### **OBJECTIVE 5**

The student will be shown how to compute their individual target heart rate at multiple rates; 75% at the beginning of the class and 80% at the end of class. Evidence of understanding will be gauged by successful completion of computation at the end of the class.

#### **OBJECTIVE 6**

Compute individual daily caloric intake on <a href="www.mypyramid.gov">www.mypyramid.gov</a> at the beginning and end of the semester. The results will be recorded into Fitness Trac at the beginning and end of the semester show progress based on increased levels of physical activity. Results will be transferred to SPSS to display levels standard deviation of a given student population.

#### **OBJECTIVE 7**

This objective will be measured by having students answer pre and post assessment surveys on Moodle focusing on the value added to a healthy lifestyle by participating in physical activity. Results from the surveys will be entered into a computer statistical package, SPSS 14.0.

#### **MEASURMENT TOOL**

The Statistical Package for the Social Sciences (SPSS 14.0) was used to collect data and create descriptive statistics. The descriptive statistics measurements of the mean, standard deviation, and paired samples dependent T- test will be computed to indicate to the instructor areas of action. Areas of action include change in course delivery, content changes, and general teaching.

#### PE 1081 Introduction to Fitness & Wellness- On-Line Assessment Results

Table 1.1- Spring 2010- Item by Item Analysis Reporting Format

Statistics	Moodle CONTENT	Moodle CONTENT	
	ASSESSMENT #1 N= 229	ASSESSMENT #2 N= 137	
Line Item Analysis			Difference
#1	88%	85%	-3%
#2	98%	98%	0%
#3	93%	90%	-3%
#4	86%	94%	+8%
#5	94%	91%	-3%
#6	77%	94%	+17%
#7	89%	80%	-9%
#8	74%	70%	-4%
#9	25%	42%	+17%
#10	100%	98%	-2%

Table 1.2- Fall 2010- Item by Item Analysis Reporting Format

Statistics	Moodle CONTENT ASSESSMENT #1 N= 305	Moodle CONTENT ASSESSMENT #2 N= 217	
Line Item Analysis			Difference
#1	89%	91%	+2%
#2	98%	100%	+2%
#3	92%	95%	+3%
#4	90%	92%	+2%
#5	95%	95%	0%
#6	75%	83%	+12%
#7	90%	92%	+2%
#8	76%	78%	+2%
#9	25%	42%	+17%
#10	97%	99%	+2%

Table 1.3 - Spring 2011- Item by Item Analysis Reporting Format

Statistics	Moodle CONTENT	Moodle CONTENT	
	ASSESSMENT #1	ASSESSMENT #2	
	N= 248	N= 168	
Line Item Analysis			Difference
#1	89%	89%	0%
#2	99%	95%	-4%
#3	93%	93%	0%
#4	88%	92%	+4%
#5	94%	92%	-2%
#6	76%	84%	+8%
#7	94%	94%	0%
#8	72%	75%	+3%
#9	24%	46%	+22%
#10	98%	98%	0%

#### **2010 Action Plan:**

More emphasis will be placed on describing anaerobic and aerobic type activities to improve levels of understanding in the content area measured in the assessment. Most incoming freshman do not grasp the difference in the two concepts.

#### **Findings:**

#### **Fall 2010**

The line item analysis has provided statistical evidence to support deficiencies in the knowledge base of incoming students. The line items measure the core objectives of the course. Each line item shows where more emphasis can be placed in the course as well as adjusting the content of the Moodle quizzes to cover content in more detail.

#### 2011 Action Plan:

A measure of validity and reliability will be conducted on each question to improve the assessment test questions on an item by item basis

#### **Findings:**

#### **SPRING 2011**

The area of deficiency for all incoming students is the difference between aerobic and anaerobic physical activity.

#### **2011-12 Action Plan:**

Providing charts in the fitness center to explain aerobic versus anaerobic exercise will be emphasized.

#### PE 1081 Introduction to Fitness & Wellness -Male Physical Assessments

Table 2.0 Physical Assessment Results – Male – SPRING 2010

ASSESSMENT MEASURE	N	Mean	Std. Deviation	Std. Error Mean
Trunk Lift 1	42	15.60	3.276	.506
Trunk Lift 2	42	16.81	4.501	.694
Curl Ups 1	43	52.28	13.602	2.074
Curl Ups 2	43	60.28	18.309	2.792
Push Ups 1	41	34.93	37842	5.910
Push Ups 2	41	41.00	53.632	8.376
Pull Ups 1	40	13.70	6.564	1.038
Pull Ups 2	40	14.98	7.594	1.201
Sit & Reach 1	43	10.77	3.299	.503
Sit & Reach 2	43	10.62	3.265	.498
Body Comp. 1	40	19.28	10.137	1.603
Body Comp. 2	40	18.32	7.995	1.264
Fit Test 1	39	30.59	11.308	1.811
FitTest 2	39	34.33	13.712	2.196

Table 2.1 Physical Assessment Results – Male – Fall 2010

ASSESSMENT MEASURE	N	Mean	Std. Deviation	Std. Error Mean
Trunk Lift 1	58	15.47	4.0309	.566
Trunk Lift 2	58	17.16	3.870	.508
Curl Ups 1	59	52.05	16.690	2.173
Curl Ups 2	59	59.97	17.136	2.231
Push Ups 1	59	28.98	14.401	1.875
Push Ups 2	59	31.97	14.520	1.890
Pull Ups 1	57	12.77	5.158	.683
Pull Ups 2	57	15.65	8.041	1.065
Sit & Reach 1	58	9.96	3.952	.519
Sit & Reach 2	58	10.50	3.287	.432
Body Comp. 1	47	18.80	9.320	1.359
Body Comp. 2	47	18.52	9.511	1.387
Fit Test 1	47	32.85	16.263	2.372
FitTest 2	47	32.04	15.300	2.232

Table 2.2 Physical Assessment Results – Male – Spring 2011

ASSESSMENT MEASURE	N	Mean	Std. Deviation	Std. Error Mean
Trunk Lift 1	43	17.70	3.726	.568
Trunk Lift 2	43	17.90	2.448	.373
Curl Ups 1	43	50.00	16.167	2.465
Curl Ups 2	43	59.81	14.608	2.228
Push Ups 1	42	28.93	14.866	2.294
Push Ups 2	42	35.52	16.722	2.580
Pull Ups 1	43	13.93	10.762	1.641
Pull Ups 2	43	17.72	8.634	1.317
Sit & Reach 1	43	10.44	3.062	.467
Sit & Reach 2	43	11.23	2.964	.452
Body Comp. 1	39	20.47	11.163	1.788
Body Comp. 2	39	19.91	11.135	1.783
Fit Test 1	36	25.94	10.284	1.714
FitTest 2	36	30.22	8.858	1.476

Figure 2.1 Spring 2010-Males

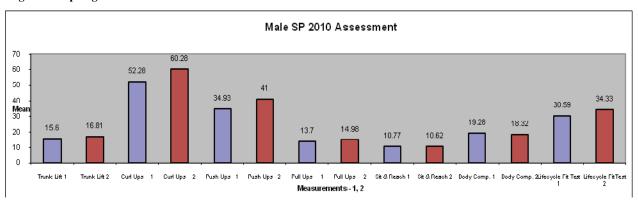


Figure 2.2 Fall 2010-Males

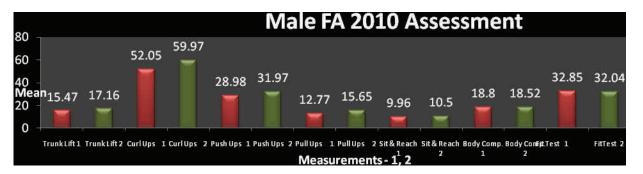


Figure 2.3 Spring 2011- Males

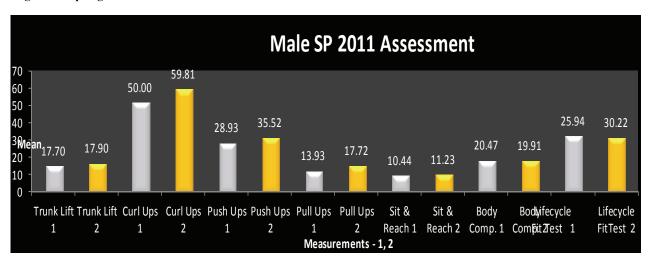


Table 2.3

Paired Samples – Dependent T-Test – Male Spring 2010

Pair	Mean	Std. Dev.	Std Error Mean	t
TL 1 – TL2	1.214	3.810	.588	2.066
CU 1 – CU2	8.00	11.297	1.723	4.644
PU 1- PU2	6.073	64.504	10.074	.603
PL 1- PL2	1.275	3.063	.484	2.632
SR 1 – SR2	150	1.832	.279	537
BC 1 – BC 2	960	3.840	.607	1.581
LF 1 - LF 2	3.744	11.066	1.772	2.113

Table 2.4

#### Paired Samples – Dependent T-Test – Male Fall 2010

Pair	Mean	Std. Dev.	Std Error Mean	t
TL 1 – TL2	1.690	4.358	.572	2.953
CU 1 – CU2	7.915	10.526	1.370	5.776
PU 1- PU2	2.983	6.786	.883	3.376
PL 1- PL2	2.877	5.635	.746	3.855
SR 1 – SR2	.543	2.205	.290	1.876
BC 1 – BC 2	272	5.473	.798	341
LF 1 - LF 2	809	9.520	1.389	582

Table 2.5

Paired Samples – Dependent T-Test – Male Spring 2011

Pair	Mean	Std. Dev.	Std Error Mean	t
TL 1 – TL2	.198	3.960	.604	.327
CU 1 – CU2	9.184	9.325	1.422	6.901
PU 1- PU2	6.595	7.846	1.211	5.447
PL 1- PL2	3.791	9.476	1.445	2.623
SR 1 – SR2	.787	1.314	.200	3.928
BC 1 – BC 2	564	2.624	420	-1.343
LF 1 - LF 2	4.278	7.596	1.266	3.379

#### 2010 Action Plan:

Increase emphasis on body composition and dietary/exercise habits to decrease body fat percentage.

#### **Spring 2010 Findings:**

Decreases in flexibility occurred in the male population in the class. A contributing factor could be shift in age demographics with older students making up a higher percentage of male students.

#### 2011 Action Plan:

Encourage and involve students in a more active stretching routine for the cool down phase of the workout to increase flexibility.

#### **Spring 2011 Findings:**

Body fat percentages have decreased over the course of the semester, but have gradually increased in the overall mean body composition. A contributing factor could be shift in age demographics with older students making up a higher percentage of male students.

#### **2011-12 Action Plan:**

Introduce more options for students to find healthy alternatives to decrease body fat percentage such as 3-mile per day walking plan and dietary changes.

#### PE 1081 Introduction to Fitness & Wellness – Female Physical Assessments

Table 3.0 Physical Assessment Results – Female Spring 2010

ASSESSMENT MEASURE	N	Mean	Std. Deviation
Trunk Lift 1	103	15.709	3.312
Trunk Lift 2	103	18.738	4.585
Curl Ups 1	103	44.621	13.539
Curl Ups 2	103	50.398	15.470
Push Ups 1	102	10.490	7.572
Push Ups 2	102	13.392	8.833
Pull Ups 1	101	3.703	3.303
Pull Ups 2	101	4.683	3.448
Sit & Reach 1	103	11.951	3.281
Sit & Reach 2	103	12.199	3.062
Body Comp. 1	100	34.228	10.295
Body Comp. 2	100	33.933	9.959
Lifecycle Fit Test 1	97	30.948	12.512
Lifecycle Fit Test 2	97	32.742	11.221

**Table 3.1 Physical Assessment Results – Female Fall 2010** 

ASSESSMENT MEASURE	N	Mean	Std. Deviation
Trunk Lift 1	109	15.550	3.606
Trunk Lift 2	109	18.532	4.219
Curl Ups 1	109	42.826	12.379
Curl Ups 2	109	50.819	15.645
Push Ups 1	109	11.352	.999
Push Ups 2	109	12.648	.868
Pull Ups 1	109	4.126	.763
Pull Ups 2	109	4.362	.319
Sit & Reach 1	109	12.002	.318
Sit & Reach 2	109	12.197	.304
Body Comp. 1	92	31.112	.993
Body Comp. 2	92	31.429	1.08
Lifecycle Fit Test 1	96	31.177	1.271
Lifecycle Fit Test 2	96	30.396	1.031

Table 3.2 Physical Assessment Results – Female Spring 2011

ASSESSMENT MEASURE	N	Mean	Std. Deviation
Trunk Lift 1	88	17.39	3.955
Trunk Lift 2	88	17.91	3.136
Curl Ups 1	87	46.64	11.475
Curl Ups 2	87	51.61	14.833
Push Ups 1	86	10.76	8.033
Push Ups 2	86	13.24	8.496
Pull Ups 1	87	3.02	2.936
Pull Ups 2	87	4.20	3.748
Sit & Reach 1	87	11.51	2.789
Sit & Reach 2	87	11.96	2.675
Body Comp. 1	71	33.85	11.334
Body Comp. 2	71	33.11	10.461
Lifecycle Fit Test 1	80	29.96	12.340
Lifecycle Fit Test 2	80	33.73	12.435

Figure 3.0 Spring 2010-Females

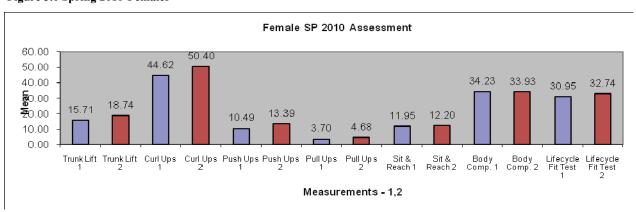


Figure 3.1 Fall 2010- Females

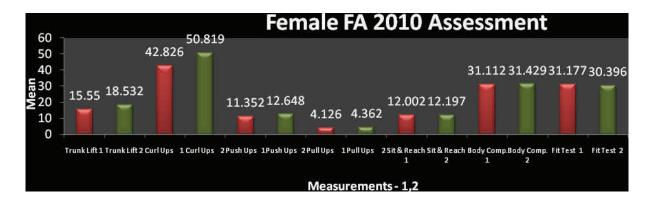


Figure 3.2 Spring 2011-Females

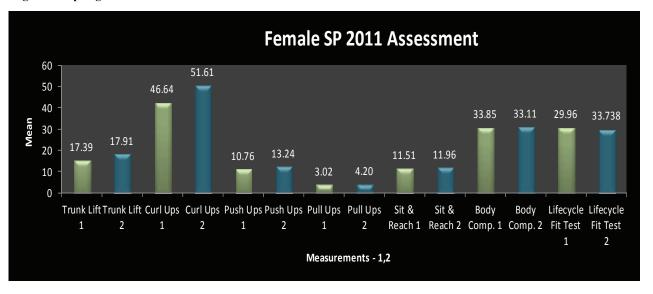


Table 3.3
Paired Samples – Dependent T-Test – Female- Spring 2010

Pair	Mean	Std. Dev.	Std Error Mean	t
TL 1 – TL2	3.029	3.927	.387	7.827
CU 1 – CU2	5.776	13.709	1.350	4.276
PU 1- PU2	2.902	4.595	.4550	6.378
PL 1- PL2	.980	1.970	.1961	4.998
SR 1 – SR2	.247	1.704	.1679	1.474
BC 1 – BC 2	294	3.605	.3606	817
LF 1 - LF 2	1.793	9.404	.9548	1.879

Table 3.4
Paired Samples – Dependent T-Test – Female- Fall 2010

Pair	Mean	Std. Dev.	Std Error Mean	t
TL 1 – TL2	2.981	4.348	.416	7.1598
CU 1 – CU2	7.993	15.048	1.441	5.546
PU 1- PU2	1.296	7.886	.758	1.708
PL 1- PL2	.236	7.220	.691	.342
SR 1 – SR2	.195	2.570	.2246	.792
BC 1 – BC 2	.317	3.914	.4081	.778
LF 1 - LF 2	781	11.763	1.200	651

Table 3.5

Paired Samples – Dependent T-Test – Female- Spring 2011

Pair	Mean	Std. Dev.	Std Error Mean	t
TL 1 – TL2	.5170	3.4253	.3651	1.416
CU 1 – CU2	4.9713	10.5020	1.1259	4.415
PU 1- PU2	2.4826	3.9455	.4255	5.835
PL 1- PL2	1.1810	1.8831	.2019	5.850
SR 1 – SR2	.4483	1.2129	.1300	3.447
BC 1 – BC 2	7437	3.3519	.3978	-1.869
LF 1 - LF 2	3.7750	10.0189	1.1202	3.370

#### Fall 2010 Action Plan

A more detailed instructional delivery will include working on improving body composition with a focus on activity levels, age, and metabolism.

#### **Spring 2010 Findings:**

Improvements held true in all areas of assessment in physical performance. The negative body composition number is good, but only slight improvement was made.

#### **2011 Action Plan**

The same action plan would be present as the previous semester. A more detailed instructional delivery will include working on improving body composition with a focus on activity levels, age, and metabolism.

#### **Spring 2011 Findings:**

Body fat percentages have decreased over the course of the semester, but have gradually increased in the overall mean body composition. A contributing factor could be shift in age demographics with older students making up a higher percentage of male students.

#### **2011-12 Action Plan:**

Introduce more options for students to find healthy alternatives to decrease body fat percentage such as 3-mile per day walking plan and dietary changes.

#### **Sociology Department Results**

Submitted by Dr. William J. Cunningham and the Sociology/Psychology Faculty

#### **Sociology Department Assessment Strategies:**

Because there is no nationally standardized examination available for introductory level Sociology courses, the full-time instructors in the Sociology and Psychology Departments collaborated to develop a common pre-test/post-test for assessment purposes. All instructors teaching General Sociology are asked to administer the 40 item multiple-choice examination at the beginning and conclusion of each term. In the assessments reported below the 40 multiple choice items are embedded in the comprehensive final administered during finals week.

#### **General Sociology:**

Students from 6 sections of General Sociology completed both the pre- and post test. Data from the 2010-2011 academic year are summarized below:

#### **Fall 2010**

• Number of Students Tested: 82 students-3 sections

Pre-Test Mean Score: 40% correct
Post-Test Mean Score: 65% correct

#### **Spring 2011**

• Number of Students Tested: 106 students-3 sections

Pre-Test Mean Score: 40% correct
Post-Test Mean Score: 70% correct

#### **Evaluation of Pre and Post Test Data:**

The full-time faculty in the Sociology and Psychology Departments reviewed the test results for differences in mean scores between individual sections of the course taught during the academic year. First, the Sociology pre-test has provided a very consistent measure of what the students' basic knowledge of Sociology as they enter the classroom. In all 6 sections the average score was a 40% on the pre-test. Second, looking at the post-test results there is a significant increase in their knowledge of Sociology after taking the class and taking the comprehensive final exam for the course.

In addition to overall mean score differences, individual item analysis was conducted to determine any relationships in correct answers between pre-test and post-test responses. Through item analysis, faculty attempted to indentify if the majority of incorrect answers were either a question one would define as an identification question or an application question. The pattern of missed questions seemed to fall primarily in the category of identification questions which is asking the student to be more familiar with definitions and vocabulary.

In order to address this issue the faculty will have to develop strategies of teaching and test reviews to help students retain the information more frequently. The results will allow faculty to discuss content areas where emphasis may be being less consistently applied across sections of the course.

During the 2010-2011 school year, the full-time faculty employed a qualitative assessment tool called a C.A.T. to further examine how students perceive course content, including the textbook and materials used, as well as the various teaching strategies employed for specific content areas within the course. The full-time faculty offer the General Sociology course without prerequisites to invite developmental students into the course. The full-time faculty is always exploring new teaching methods to help all students in the class to be successful. Thus, assignments, extra credit assignments, and teaching strategies are always analyzed and reviewed as to their effectiveness to these ends.

## Learning Center Assessment Report

Throughout the Fall 2010 semester, surveys were administered to students randomly after they took a test in the Testing Center. The Testing Center was in temporary space on the bottom floor of the MP building.

#### The Testing Center Satisfaction Survey Results Fall 2010-MP Bldg

99% agreed or strongly agreed that TC staff was professional.

97% agreed or strongly agreed that the TC login process was efficient.

77% agreed or strongly agreed that the TC provided sufficient storage space.

89% agreed or strongly agreed that the testing room had enough seating.

95% that the testing computers met their needs.

93% agreed or strongly agreed that the temperature in the testing room was comfortable.

92% agreed or strongly agreed that the testing room was quiet.

93% agreed or strongly agreed that the testing room was distraction-free.

#### Comments:

- 1. TC rated the highest in the area of staff being professional.
- 2. Rated second was the login process, which is also a reflection of staff efficiency, to some extent.
- 3. Our lowest point was in regard to storage space for students. The lockers are old and clumsy to use (have doors that stick.) New lockers will be provided in the new Learning Center.

#### The Learning Center Satisfaction Survey Results—Spring 2011 AD Bldg

94% agreed or strongly agreed that TLC space is appropriate for individual study.

69% agreed or strongly agreed that TLC space is appropriate for group study.

98% agreed or strongly agreed that TLC computers meet their academic needs.

91% agreed or strongly agreed that TLC environment is conducive to studying.

97% agreed or strongly agreed that TLC staff is helpful.

95% agreed or strongly agreed that TLC login process is user-friendly.

#### Comments:

- 1. TLC staff and computers scored the highest.
- 2. TLC space was not rated very highly for group study. Students will appreciate the Learning Center and Library's group study rooms in the new space.
- 3. We also hope to score higher in our new space overall on space issues.

ΔΙ	l Sti	ıde	nts*

	Received Tutoring**		Little or No Tutoring***
Α	15	19.5%	na
В	25	32.5%	na
С	19	24.7%	na
D	3	3.9%	na
F	7	9.1%	na
W	8	10.4%	na
Total	77	100.0%	na

<sup>- 76.6%</sup> of students who received 3 or more tutoring sessions, successfully completed the courses w/ an A, B or C

**English Tutoring** 

	Received Tutoring**		Little or No Tutoring***		
A	4	23.5%	na		
В	9	52.9%	na		
С	1	5.9%	na		
D	1	5.9%	na		
F	1	5.9%	na		
W	1	5.9%	na		
Total	17	100.0%	na		

<sup>- 82.4%</sup> of students who received 3 or more tutoring sessions, successfully completed the English course w/ an A, B or C

**Math Tutoring** 

	Received Tu	utoring**	Little or No Tutoring***		
А	11	18.3%	na		
В	16	26.7%	na		
С	18	30.0%	na		
D	2	3.3%	na		
F	6	10.0%	na		
W	7	11.7%	na		
Total	60	100.0%	na		

<sup>- 75.0%</sup> of students who received 3 or more tutoring sessions, successfully completed the Math course w/ an A, B or C

#### **Notes:**

- \*Data includes students who completed an English or Math course in 10/FA
- \*\*Received tutoring 3 or more times in the given subject
- \*\*\* Due to the relocation of the Learning Center and cessation of recording student visits; we **cannot** determine which students utilized tutoring services. Therefore, comparable data **will not be** included.

## Student Services Assessment Report

## East Central College Student Services Center Oct/Nov 2010



## 1. Please rate your overall satisfaction on the following items from your visit(s)to the Student Services Center.

	Highly	Somewhat	Somewhat	Highly	Response
	Satisfied	Satisfied	Dissatisfied	Dissatisfied	Count
Wait time before being served:	27.6% (8)	41.4% (12)	24.1% (7)	6.9% (2)	29
Time to resolve your inquiry:	28.6% (6)	61.9% (13)	4.8% (1)	4.8% (1)	21
Knowledgeable and helpful staff:	52.4% (11)	38.1% (8)	4.8% (1)	4.8% (1)	2
Courteous and professional staff:	64.3% (18)	21.4% (6)	7.1% (2)	7.1% (2)	28
Convenience of Student Services:	46.2% (18)	30.8% (12)	7.7% (3)	15.4% (6)	30

Comments:

answered question 51
skipped question 0

	WALKSTON	120000000
	Response Percent	Response Count
Walk-In	92.2%	47
Telephone	25.5%	≲13
Email	17.8%	9
Fax	0.0%	0
	answered question	51
	skipped question	30

## East Central College Student Services Center Jan 5 SurveyMonkey 2011

## 1. Please rate your overall satisfaction on the following items from your visit(s)to the Student Services Center.

	Highly	Somewhat	Somewhat	Highly	Response
	Satisfied	Satisfied	Dissatisfied	Dissatisfied	Count
Wait time before being served:	59.1% (26)	31.8% (14)	9.1% (4)	0.0% (0)	744
Time to resolve your inquiry:	70.5% (31)	20.5% (9)	9.1% (4)	0.0% (0)	44
Knowledgeable and helpful staff:	63.6% (28)	29.5% (13)	6.8% (3)	0.0% (0)	744
Courteous and professional staff:	69.8% (30)	16.3% (7)	14.0% (6)	0.0% (0)	43
Convenience of Student Services:	63.6% (28)	18.2% (8)	9.1% (4)	9.1% (4)	144

answered question 44
skipped question 0

Comments:

11

	Response Percent	Response Count
Walk-in	97.7%	43
Telephone	56.8%	<b>2</b> 5
Email	22.7%	10
Fax	4.5%	2
	answered question	44
	skipped question	:0

## East Central College Student Services Center Feb SurveyMonkey 2011

## 1. Please rate your overall satisfaction on the following items from your visit(s)to the Student Services Center.

	Highly Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Highly Dissatisfied	Response
	Sausileu	Sausneu	Dissatistied	Dissatistied	Count
Wait time before being served:	44.4% (8)	50.0% (9)	5.6% (1)	0.0% (0)	18
Time to resolve your inquiry:	66.7% (12)	33.3% (6)	0.0% (0)	0.0% (0)	18
Knowledgeable and helpful staff:	77.8% (14)	22.2% (4)	0.0% (0)	0.0% (0)	18
Courteous and professional staff:	66.7% (12)	27.8% (5)	5.6% (1)	0.0% (0)	18
Convenience of Student Services:	61.1% (11)	33.3% (6)	5.6% (1)	0.0% (0)	118

Comments:

answered question 18
skipped question 0

		Response Percent	Response
e v	/alk-in	100.0%	1
Tel	ephone	38.9%	8
	Email	22.2%	ĝ
	Fax 🔲	5.6%	2
		answered question	1
		skipped question	3

#### East Central College Student Services Center March 2011



### 1. Please rate your overall satisfaction on the following items from your visit(s)to the Student Services Center.

	Highly Somewhat	Somewhat	- Diagon	Response	
	Satisfied	Satisfied	Dissatisfied	Highly Dissatisfied	Count
Wait time before being served:	59.4% (19)	31.3% (10)	6.3% (2)	3.1% (1)	32
Time to resolve your inquiry:	64.5% (20)	22.6% (7)	6.5% (2)	6.5% (2)	31
Knowledgeable and helpful staff:	71.0% (22)	19.4% (6)	0.0% (0)	9.7% (3)	31
Courteous and professional staff:	70.0% (21)	16.7% (5)	3.3% (1)	10.0% (3)	30
Convenience of Student Services:	67.7% (21)	25.8% (8)	0.0% (0)	6.5% (2)	31

Comments:

answered question	32
skipped question	0

	Response Percent	Response
Walk-In	90.6%	2
Telephone	31.3%	S16
Email	15.6%	į
Fax	0.0%	B
	answered question	3
	skipped question	

#### East Central College Student Services Center April 2011



## 1. Please rate your overall satisfaction on the following items from your visit(s)to the Student Services Center.

	Highly	Somewhat	Somewhat	Highly	Response
	Satisfied	Satisfied	Dissatisfied	Dissatisfied	Count
Wait time before being served:	72.5% (50)	23.2% (16)	2.9% (2)	1.4% (1)	6
Time to resolve your inquiry:	72.5% (50)	20.3% (14)	4.3% (3)	2.9% (2)	6
Knowledgeable and helpful staff:	78.3% (54)	14.5% (10)	2.9% (2)	4.3% (3)	× 6
Courteous and professional staff:	76.8% (53)	14.5% (10)	5.8% (4)	2.9% (2)	6
Convenience of Student Services:	72.1% (49)	13.2% (9)	11.8% (8)	2.9% (2)	6

Comments: 15

answered question	69
skipped question	0

	Respons Percent	
Walk-In	94.11	6
Telephone	57.43	6 93
Email	27.91	
Fax	7.43	<b>6</b> (1
	answered questio	1 6
	skipped question	n 8

## East Central College Student Services Center May 🏠 SurveyMonkey 2011

## 1. Please rate your overall satisfaction on the following items from your visit(s)to the Student Services Center.

	*******	access and access	- Maria Company	23042042042	200000000000000000000000000000000000000
	Highly Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Highly Dissatisfied	Response
	Saustieu	Saustieu	Dissatistied	Dissaustied	Count
Wait time before being served:	41.4% (12)	48.3% (14)	6.9% (2)	3.4% (1)	2
Time to resolve your inquiry:	46.4% (13)	35.7% (10)	10.7% (3)	7.1% (2)	2
Knowledgeable and helpful staff:	60.7% (17)	28.6% (8)	7.1% (2)	3.6% (1)	2
Courteous and professional staff:	67.9% (19)	21.4% (6)	10.7% (3)	0.0% (0)	2
Convenience of Student Services:	46.4% (13)	32.1% (9)	17.9% (5)	3.6% (1)	2

answered question 29
skipped question 0

Comments:

	Response Percent	Response
Walk-In	82.1%	2
Telephone	35.7%	\$ <b>1</b>
Email	10.7%	ļ
Fax	3.6%	2
	answered question	2
	skipped question	

#### East Central College Student Service Center June/July 2011



## 1. Please rate your overall satisfaction on the following items from your visit(s)to the Student Service Center.

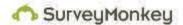
	Highly Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Highly Dissatisfied	Response
Wait time before being served:	42.1% (8)	42.1% (8)	10.5% (2)	5.3% (1)	19
Time to resolve your inquiry:	57.9% (11)	21.1% (4)	15.8% (3)	5.3% (1)	19
Knowledgeable and helpful staff:	52.6% (10)	21.1% (4)	15.8% (3)	10.5% (2)	19
Courteous and professional staff:	52.6% (10)	31.6% (6)	15.8% (3)	0.0% (0)	19
Convenience of Student Services:	52.6% (10)	26.3% (5)	10.5% (2)	10.5% (2)	19

Comments: 5

answered question	19
skipped question	0

Count	Response Percent	
1	94.7%	 Walk-In
9	47.4%	Telephone
ĺ	5.3%	Email
B	0.0%	Fax
H	answered question	
9	skipped question	

#### FAFSA Night Survey



	Response Percent	Response
Extremely valuable	85.2%	23
Very valuable	11.1%	į.
Neutral	3.7%	
Not valuable	0.0%	200
	answered question	2
	171 V 100	3
. Could you have complete	skipped question ed the FAFSA without the help provided at the ECC FAFSA	
20.0		Ç)
	ed the FAFSA without the help provided at the ECC FAFSA Response	Respons
ebruary event?	ed the FAFSA without the help provided at the ECC FAFSA  Response Percent	Respons
ebruary event?	ed the FAFSA without the help provided at the ECC FAFSA  Response Percent	Respons Count
February event?  Yes No	Response Percent  14.8%	Respons Count

## Completer Assessments

### **CAAP Critical Thinking Comparative Data**

	Raw Score Compariso	n
	FS 1001 Cohort	Spring 2011 Graduates
	n= 103	n = 145
Range of Scores	49 - 69	52 - 72
Average Score	59.79	62.67
Median Score	60	64

National Percentile Rank Comparison						
	FS 1001 Cohort Spring 2011 Graduate					
	n= 103	n = 145				
50th Percentile or Above	45%	68%				
75th Percentile or Above	19%	34%				
90th Percentile or Above	11%	17%				

# Program Reviews Self Study Reports

#### Transfer Engineering Program Review Report Completed by the Review Team

#### I. General Information

#### Overview

Vision: Preparing students for successful transfer and completion of their engineering degree. Mission: To develop problem-solving skills and subject matter competencies through effective educational methods.

The Pre-engineering Department at East Central College prepares students for transfer to a four-year institution to complete a degree in the engineering field of their choice. The majority of students transfer to Missouri University of Science and Technology (MS&T), under an articulation agreement that defines the classes to be taken for each major. A similar agreement exists with the University of Missouri – Columbia (MU), although the articulation agreement with MU has not been updated in several years. This is an area we can explore, although MU has been non-responsive to invitations to visit our campus for recruiting engineering students. MS&T is very active in recruiting ECC students, and works to make the transfer experience as smooth and successful as possible.

The department consists of one professor and an instructional assistant. Classes in mathematics and chemistry are taught by professors in those departments. The physics classes for engineering majors are taught by the pre-engineering professor, as are most of the engineering classes. In the recent past, the Circuits class has been taught by the physics professor, and the programming class (C++) is taught in the mathematics department, based on the expertise of the teaching personnel.

A major strength of the department is an instructional assistant whose primary responsibility is assisting and tutoring students in the subject matter, and who actively assists with administrative and recruitment activities. Emphasis on completing homework has been a priority of the department, based on the theory that students best learn problem-solving by solving problems.

#### II. Enrollments and Students

#### Enrollment

Enrollment figures for the past several years are presented in Table 1, and summarized in Chart 1. Of the students in the pre-engineering program, many are in introductory mathematics classes, such as algebra or precalculus. As the formal engineering program requirements begin the mathematics sequence with Calculus I, we have chosen to measure the pre-engineering enrollment by counting those students in Calculus I who have declared engineering as their major. For comparison purposes, we show the total number of declared engineering students (for the years 05 to 08). As can be seen, the total number of engineering majors is substantially higher than the Calculus I cohort.

The total number of declared engineering majors includes the second year students (third row of Table 1). As can be seen, however, the number of students who are not yet ready to enter the engineering curriculum proper (last row of Table 1) is a significant fraction of the total majors. As many of the "pre-curriculum" students choose to change majors, they affect the retention figures for the department. In order to get a better measure of retention within the program, we are splitting the program into two parts—a "pre-engineering" major for students who are not ready for the Calculus I class, and a "transfer engineering" major for students who have entered the engineering program proper. This issue will be discussed again in the retention analysis below.

Acad. Year	05/06	06/07	07/08	08/09	09/10	10/11
Total engineering majors	60	78	87	99	130	131
Calc I engineering	23	38	34	40	62	58
Sophomore engineering majors	9	13	11	15	15	20
Pre- curriculum students	28 (47%)	27 (35%)	42 (48%)	44 (44%)	53 (41%)	53 (40%)

Table 1

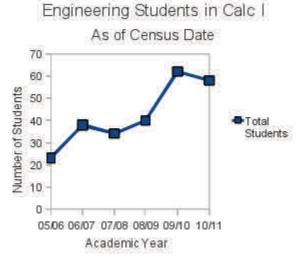


Chart 1

Considerable growth over the past six years is evident. Some of the growth in enrollment is attributable to the difficult economy, as many students will attend college if no jobs are available. As the ECC enrollment overall shows a decline in the current year, we may

expect the growth in engineering enrollment to slow, or possibly go into a decline in future years. Some growth in enrollment may be due to recruitment efforts by the department, such as the collaboration with Missouri S&T to present an Math/Science Career event, and the WYSE (Worldwide Youth in Science and Engineering) competition, which brings approximately two hundred high school students to campus for an academic competition. The subjects tested are not restricted to engineering and mathematics topics, so the event serves general recruitment for the campus as well as the department.

#### **Student Success**

Student success is measured on a per-class basis as successfully completing the course with a grade of C or better. On the program basis, success is defined as completing the transfer to a four-year institution to successfully continue their education. We do not have (at this time) sufficient data to determine the success rate of students after transfer, but subjective reports from transfer students, and their transfer institutions, suggest that transferring students are quite well prepared and succeed at rates similar to those of native students at the transfer institution. This statistical information has been requested from Missouri S&T, but their Institutional Research department has been unable or unwilling to furnish it to date.

The per class success is more easily measured. Table 2 indicates the number of students who enter Calculus and Physics classes (as of the census date) and the number who complete the class with an A, B or C. Chart 2 indicates the percentage success rates for these classes.

Academic Year	05/06	06/07	07/08	08/09	09/10	10/11
Calculus I	23	38	34	40	62	58
Successful	11	26	21	17	23	24
	47.8%	68.4%	61.8%	42.5%	37.1%	41.4%
Calculus II	22	12	24	29	25	36
Successful	16	10	14	18	18	26
	72.7%	83.3%	58.3%	62.1%	72.0%	72.2%
Calculus III	15	12	16	16	18	19
Successful	15	10	15	11	15	11
	100.0%	83.3%	93.8%	68.8%	83.3%	57.9%
Physics I	16	15	18	24	17	29
Successful	10	15	14	16	15	26
	62.5%	100.0%	77.8%	66.7%	88.2%	89.7%
Physics II	10	9	13	11	15	15
Successful	8	8	10	9	12	13
	80.0%	88.9%	76.9%	81.8%	80.0%	86.7%

Table 2

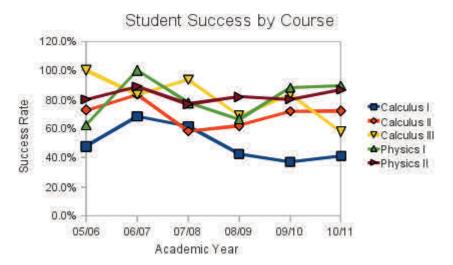


Chart 2
The data summarized in Chart 2 does not show much of a trend by year, suggesting that student success is essentially driven by the capabilities of students in each cohort.

However, looking at average success rates by class does give some insight into student performance. Chart 3 shows the average success rates for the above classes arranged by course, in the traditional order of completion.

### Student Success Rates by Course

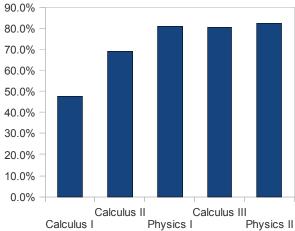


Chart 3

As can be seen from Chart 3, success rates increase significantly as students progress through the calculus sequence, and enter the physics classes. This is almost certainly due to the attrition of students who are unwilling to devote the time and effort required to succeed in the engineering program, leaving only the most highly motivated students. This raises the question of retention, addressed in the next section.

#### **Student Retention**

In addition to increasing enrollment, the department has been attempting to address retention of students as well. Retention can be considered in two ways—institutionally and departmentally.

While many students do leave the engineering program, that does not mean they leave college—many of them can be expected to change to other majors and continue their career at ECC or other schools. In a study conducted in 2010, it was found that, of students who were declared engineering majors in a given Fall term, an average of 74% returned as engineering majors in one of the two following terms, and 85% remained at ECC. This suggests that around 42% of students who leave the engineering program remain at ECC. (The actual fractions ranged from 24% to 50% over the five years studied) It is not known how many of them choose to continue their education at another college.

Measuring departmental retention is somewhat problematic, as many students choose to transfer before completing the graduation requirements. The method chosen is to consider the number of students who have reached Calculus I in a given calendar year, and comparing that to the number of those who successfully complete one of the core engineering classes (Statics, Dynamics, Circuits, or Differential Equations) in the following calendar year. Successfully completing one of these classes indicates that the student has remained in the program long enough to be counted as a successful major (as they can, generally speaking, transfer to their four year institution at that point.) Beginning with the number of Calculus I students in the previous year allows us to measure retention of students who have entered the engineering curriculum proper, as discussed in the enrollment section above.

	2006	2007	2008	2009
Students in Calculus I in calendar year	20	30	32	35
Students successfully completing a core Engineering class within two years	4	10	9	14
% Retention	25.00%	33.00%	28.00%	40.00%

Table 3

The data in Table 3 reflects this definition of retention, showing the number of unique Calculus I students with a declared engineering major who go on to complete any of the core engineering classes within the next two years. It is evident that the retention rate is lower than desired. Even with the belief that around 40% of engineering students who leave the program stay at ECC, this is an area that the department has been addressing, and will continue to emphasize. However, the fact remains that some students will enter the program, and after experiencing the calculus and physics sequences, will decide that engineering is not the right career for them. Such students are right to leave the program.

One approach is to attempt to identify students who are unlikely to persist with the program, and advise them to consider alternative careers. This is problematic for two reasons. One is that students should be given as much information as possible, but the ultimate decision of what

field to enter should be their own. Secondly, even if a student decides against continuing in engineering, the mathematical and analytical skills developed in the earlier program classes may well be useful to them in other fields. The best we can do is to assist all those students who wish to remain in the program, but who are experiencing difficulties, with tutoring and encouragement.

#### **Graduation Rates**

Another issue facing the department is a low graduation rate. Many students choose to transfer before completing all graduation requirements. Others may choose not to apply for graduation, despite being eligible, because graduation is not a requirement for transfer to Missouri S&T, and possibly to other engineering programs.

The data in Table 4 give the number of unique students who successfully complete any of the final semester engineering classes (Dynamics, Circuits, or Differential Equations), and how many of those go on to graduate. In general, a student who successfully completes any one of those classes is prepared for transfer. Not all of them may have met every graduation requirement, although many will have. However, they will take classes after transfer which, if transcripted back to ECC, would allow the students to graduate, thus increasing the number of graduates at ECC by several students per year.

	07/SP	08/SP	09/SP	10/SP	11/SP
Transferring Students	10	11	13	15	16
Graduates	8	7	3	10	12
	80.0%	63.6%	23.1%	66.7%	75.0%

Table 4

# III. Program Resources Physical Resources:

The physical resources of the pre-engineering program are based on the physics department's laboratory resources, and the classrooms available to the program. While there have in the past been more or less dedicated rooms for engineering students to use for studying and homework, there is not currently a study room explicitly dedicated for that purpose. The department has been using the physics laboratory as a study hall when it is not in use. In addition, many students use the open lab (CC 208). While a dedicated room is not essential to the program, it is important that the engineering students have a comfortable place to congregate and study in groups. We find that group work on homework, and mingling between the freshman and sophomore classes, are important academic and social contributors to the program. In addition, having a common study area makes the instructional assistant's presence very efficient, as she can assist many groups more or less simultaneously. As the program has grown, we find the study space constraints to be a challenge.

#### **Human Resources:**

The pre-engineering department consists of one instructor and an instructional assistant. The instructor has a good mix of skills for the subject matter, having a bachelor's degree and coursework sufficient for a master's degree in Mechanical Engineering, six years of industry experience, and a doctorate in Physics. As the General Physics class is taught within the curriculum, this educational background is good for the purpose.

The instructional assistant has a bachelor's degree in statistics, and a background in programming. This is an excellent basis for tutoring students, given the mathematically intensive nature of the curriculum.

Out of department teachers are generally teaching in their areas of specialization, with the exception of C++ programming, which is taught by a mathematics professor who has experience and expertise in that language, and is comfortable with the unix-based platform on which it is taught.

The one engineering class which has been taught outside the department for the last several years is Circuits, which has been taught by the Physics instructor. The instructor who taught that class retired, and his replacement has a PhD in Mechanical Engineering. It is anticipated that this instructor will ultimately become the primary instructor in the engineering program.

#### **Financial Resources**

While the pre-engineering budget has been reduced dramatically from its level of 15 years ago, it is still adequate to meet the needs of the physics laboratory. The institutional support for recruiting is still strong, and is a major strength of the program. Neither of the major recruiting activities (MS&T Math/Science Career Night, and the WYSE Academic Challenge) conducted by the department are limited to engineering students, so there is an institutional benefit to other disciplines and transfer programs as well.

# IV. Community

# **Employment/Transfer:**

Pre-engineering students are able to transfer easily to Missouri University of Science and Technology (MS&T) or the University of Missouri-Columbia (MU) whether they graduate from ECC or not. Graduates can generally transfer to any four-year engineering program, if grade point requirements are satisfied. Our transfer partners have been very accepting of our students. While MS&T recommends to students that they complete the calculus and physics sequences at a minimum prior to transfer, that is not a strict requirement, and occasionally students will transfer in the middle of one or the other of those sequences. Often students will transfer when one or two classes short of graduation, since there is no penalty associated with doing so, and to stay to pick up the additional class would set them behind their cohort by a semester or more. As discussed above, students may choose not to graduate even when eligible. This presents a problem for the program, as state success metrics and funding for ECC are based on graduation rates.

# **Advisory committee role:**

The pre-engineering program does not have an advisory committee.

# V. SWOT Analysis/Program Effectiveness

# **Strengths:**

Student cohesiveness—Since a cohort of engineering students share many classes, and are encouraged to work in small groups for homework and study, a certain esprit-de-corps develops within the cohort. Students often assist one another in overcoming challenges in understanding the material, or in formulating problem solutions.

Strong faculty—as described above, the engineering faculty is well prepared for the material to be covered. In addition, the math sequence taught outside the department and the required chemistry classes are covered by very capable and caring instructors. Collectively, the instruction our students receive compares very favorably with that at the transfer institution, especially considering the institutional focus on instruction rather than research at ECC.

Good institutional support—The college has been generous in supporting the recruiting activities of the department. The budget for laboratory equipment is adequate to maintain, and steadily, if slowly, improve the quantity of laboratory equipment.

Successful transfer students—Based on surveys administered to our students after they transfer, and on informal conversations with them and their instructors at Missouri S&T, our students are well-prepared to succeed after transfer. Many of them do exceptionally well at Missouri S&T, and may go on to graduate school. They actively participate in design projects, and often end up in leadership roles.

#### Weaknesses:

Shortage of equipment in the physics laboratory is still an issue, with the number of individual setups for more expensive experimental equipment limited, in many cases, to six stations. As the minimum allowable class size has increased, we now have many lab groups of three, and sometimes four, students. The optimal size for a lab group is two, so increasing the number of setups is a priority for the department.

#### **Opportunities:**

The number of students graduating from the program is somewhat lower than the number who are potentially eligible for graduation, especially if courses are transferred back from the transfer institution. This creates an opportunity for improved graduation rates, if an institutional solution to transferring the missing credits can be arranged.

Also, the attrition rate is still larger than we would like to see, even when considering only those students who are taking Calculus I as having entered the program. While some students who leave the program simply decide against engineering as a career, there may be those who would, with additional support, be able to continue in their engineering education instead of leaving the program. Those students represent an opportunity to improve our retention rate.

Another opportunity to improve the program for our students is to partner with other preengineering programs to offer online classes in Thermodynamics, Circuits II, or other classes

whose enrollments would be too low to offer in our own program. This may become a necessity even for classes such as Dynamics or Differential Equations, if our own enrollment numbers drop as outlined as a possibility above.

#### **Threats:**

Loss of personnel—From the early 1990's to around 2000, the Pre-Engineering Department had two full time instructors and an Instructional Assistant. When one instructor left the college, he was not replaced by an engineering instructor. Instead, the mathematics classes he taught were moved to the Mathematics department, and the Circuits class was assigned to his replacement, who also taught non-program physics and other classes. This decision makes perfect sense from an institutional perspective, but has reduced the cohesiveness of the department's curriculum.

More recently, the Engineering Instructional Assistant has been converted to an Engineering/Mathematics Instructional Assistant, and has also been given advisement assignments during the summer, reducing the time available to address engineering program priorities. As the IA has been forbidden from assisting with grading, the thoroughness of homework grading will be reduced.

Reduction of Student Population—as the college enrollment may have peaked, according to demographic data for the state of Missouri, it is possible that the student enrollment in the engineering program will also begin to decline. If the program to maintain its enrollment in the face of declining student populations, continued recruitment activities, and possibly new approaches to informing area students about the engineering career options offered by ECC.

#### VI. Recommendations

The engineering program at ECC is strong, and has many strengths. The greatest areas of vulnerability are in the erosion of program resources—the loss of one faculty member, and loss of some of the instructional assistant's time, and the potential for further budget cuts due to financial pressures on the college. While the number of faculty is unlikely to decrease further, the reduction of time available from the instructional assistant is impacting the program in several ways.

Furthermore, as enrollments have been growing in the past few years, the number of setups in the physics laboratory have been strained. The minimum number of students in a physics laboratory section have also been increased, to the point that instructional quality is being negatively impacted.

We recommend from an institutional perspective that the instructional assistant be allowed more time during the summers to work on online testing and tutorial applications. The department will continue to grow the physics laboratory experimental capacity as the budget permits.

Also, we intend to improve the program assessment. As most of our students transfer to MS&T, their success at that institution is of primary importance. We have requested MS&T to

provide us with anonymized data regarding our students' success in "follow-on" courses, such as Circuits II (after Circuits I), Strength of Materials (after Statics), Machine Design (after Dynamics), etc., as compared to their native student success. The admissions department at MS&T has forwarded this request to their institutional research department. We, and other community colleges, have been requesting this data for several years, and we are hopeful that MS&T will eventually make it available to us.

Other planned improvements in assessment are to use a nationally normed test in General Physics to replace the skills and understanding inventory we use currently to gauge student improvement in those classes, and to investigate cooperative ventures with other preengineering programs to increase program offerings, and insulate against the cancellation of low-enrollment classes.

The separation of the program into pre-engineering and transfer engineering has led to new departmental advisors for the pre-engineering students. In order to train those advisors, we will conduct "team advisement" sessions, in which students will be advised in groups by experienced and new advisors, so the new advisors will learn the specifics of the program curriculum options.

Furthermore, in order to accommodate changes to the state A+ program, which pays for a student's completion of an Associate's degree program in a community college, we will be separating the AS Transfer Engineering degree into degree plans grouped by hours required to complete the degree. This will allow students in mechanical engineering, for example, to be paid for all of their classes, instead of only the 64 hour minimum associated with some other degree plans.

### **Conclusion:**

The engineering program at ECC is very healthy, and has been experiencing positive growth. We have a good reputation with the local high schools, and with our primary transfer institution. Our students are well-prepared, and do well after transfer. The challenges faced by the department are generally minor, and actions to meet them are intended to improve the quality of the program.

# Transfer Engineering Program Review Report Following Team Visit on October 27, 2011

#### I. Overview

The Transfer Engineering program at East Central College has conducted a program review; activities began in the Spring of 2011 and were completed with the team visit held on October 27, 2011.

Areas evaluated include:

Program mission

Transfer and articulation

Enrollment, students and graduates

Student success and retention

Program Resources

Faculty

A SWOT analysis

Recommendations from the faculty in the program (author of the self study)

No evaluation was done of learning outcomes, program goals, curriculum and recent changes or updates. No mention was made of external accreditation opportunities, feedback or surveys from students or other evaluation. No discussion of quality improvement efforts or activities undertaken by the department was included in the document or the visit.

#### **II.** General Information

The program has adopted mission and vision statements that align with their purpose and role within East Central College. No mention was made within the self study document of how the mission is assessed and how the program makes effort to determine if indeed the program fulfills its mission.

A brief summary of transfer and articulation was provided; articulation and transfer were discussed with the review team and is considered a strength of the program.

The program is staffed by one full time faculty member, a shared faculty member (with Physics/Physical Science) and an instructional assistant who provides learning support for the students in the program. No mention of the shared faculty member was made.

#### III. Enrollments and Students

As reported in various graphs and as discussed with the team, enrollment has increased dramatically in the past several years (more than doubling since 2005/06). In order to clarify retention and graduation numbers, the program separated majors into Transfer Engineering, for students at the Calculus I level and above, and Pre Engineering for those prior to Calculus to declare. In the future, this separation will make the data clearer and more useful.

During this period of enrollment increase, the success rate in Calculus I has declined. This is an area of serious concern and one that will need further examination in the year to come. On a positive note, the retention and success in the courses with Calculus I as a

prerequisite are increasing.

A low graduation rate is another serious program weakness. Given the growing numbers at entry, the continued sluggish graduation rate warrants additional attention.

# IV. Program Resources

#### **Facilities**

The preengineering program uses space, primarily on the 2<sup>nd</sup> floor of the CC building. The current laboratory space, shared with physics is larger than the previous lab and has computer resources. Classroom space on the 2<sup>nd</sup> floor is shared with the mathematics department and is more than adequate given that the average class size in Physics/ Preengineering is 14.5, and over half the classes in the disciplines have enrollments below 15. Nearly a third have enrollments under 10.

Classrooms in this part of the building have full instructional technology and continue to include chalkboards at the request of the faculty.

In its move to CC, the department lost use of an open computer lab in the old AD building that was not exclusive to, but used primarily by, the preengineering students. The move did yield a computer lab for their use, but it is smaller at a time when entering student enrollments have increased. In the future renovation of CC, finding additional space for student use will be important. Students in the program however do have access to significant learning support and space in the campus learning center.

# **Human Resources**

Already discussed above; the faculty in the program are well qualified and credentialed ideally. The instructional assistant provides learning support to the students throughout the fall and spring and splits her time with advisement in the summer when no preengineering courses are being taught.

#### **Financial Resources**

As explained during the visit, the financial resources, when corrected for the change in budgeting for technology, have remained consistent, if not higher. Recruiting efforts are well funded and do support the overall recruiting efforts of the college.

#### V. Community

Strong community support for the program exists and was shared during the visit. Hearing many of the suggestions that came from the visit makes a strong case for the usefulness of a program advisory committee.

# VI. SWOT Analysis/Program Effectiveness

Strengths

Students working together and forming learning communities

Faculty credentials

Institutional support

Success in transfer

Articulation with a reputable baccalaureate engineering program

Dedicated instructional support

Faculty teaching within their specific disciplines

Strong incoming student enrollments

Small class sizes

Very low student to faculty ratio

Arrangements with transfer institutions for course delivery

Transfer success

#### Weaknesses

Retention rates

Poor graduation rates

Small computer lab/study area while enrollments have grown

Low enrollment classes

# Opportunities

Strong demand for graduates in the STEM fields

Additional articulation agreements/reverse transfer of coursework

Ties to community/alumni/engineering program graduates

Appropriate programming for students leaving the program for other Majors

New transfer agreement with SEMO

#### Threats

**Budgets** 

Declining pool of potential students

Low graduation rates/statewide implications

# VII. Recommendations and Suggestions

The review team, during their visit, provided faculty and staff wonderful suggestions and feedback for program improvement. Some of those suggestions:

Engineering alumni dinner, annually

Opportunities for students to have an early mentor/practicum experience

A program to introduce new majors to engineering

Partnerships with local community employers

Getting more information regarding transfer success

All of these suggestions merit further investigation and also make a case for a preengineering program advisory committee.

Follow up report submitted by: Jean McCann, Vice President, Instruction

Program Review Team Chair

# Psychology and Sociology Departments Program Review for 2011

Dr. William J. Cunningham Ms. Wendy Pecka Ms. Paula Smith-Culp

Years Covered in this Report 2007-2011

# **General Program Information**

#### Mission

The Psychology and Sociology Department in our efforts to work with students, other faculty, and ancillary instructional departments hope to accomplish the Mission of East Central College. As representatives of East Central College "we will provide an environment for lifelong learning".

# **Purpose**

Our purpose is to offer a curriculum that is student-centered, highlighted by its variety of course offerings, and noted for its differentiated instructional approaches to attempt to meet the students' individual learning styles. Our secondary purpose is to offer the student an opportunity to explore the disciplines of Psychology and Sociology to encourage the student to consider each respectively as a major of study, or simply see the relevance of our curriculum as satisfying the degree requirements to be Social Science electives.

#### **Organization and Structure**

The Psychology and Sociology departments are part of the BEST Division at East Central College consisting of Business, Education, Social Science and Technology disciplines. East Central College's instructional programs are overseen by Vice-President Ms. Jean McCann. The Division Chairperson for the BEST Division is Ms. Mary Beth Huxel. The Psychology and Sociology departments have 3 full-time faculty, Ms. Wendy Pecka, Ms. Paula Smith-Culp, and Dr. William J. Cunningham. Their credentials are as follows:

Ms. Wendy Pecka, LPC, PhD Candidate (ABD) University of Missouri-St. Louis Ms. Paula Smith-Culp, LPC, M.S. Counseling –University of Central Missouri Dr. William J. Cunningham, PhD, LCSW-St. Louis University

#### **Learning Outcomes**

#### **Program Goals**

In its efforts to meet the purposes stated to meet the Mission of East Central College, the Psychology and Sociology departments have delineated our purposes in more concrete goals and objectives. These goals and objectives will be demonstrated in the data which indicates our directive action in areas of Curriculum and Course information, student enrollment numbers

in our courses, course placement and course sequence information. The data collected for the years 2007-2011 will reflect the graduate numbers, student transfer data, and our student retention percentages.

# **Program Goal 1**

The Psychology and Sociology departments will implement a student-centered approach in each course offered at East Central College by providing differentiated instructional strategies to enhance the student's learning. These strategies will include collaborative learning techniques, interactive techniques, and group work activities to enhance the student's engagement in the classroom

# **Program Goal 2**

The Psychology and Sociology Department will provide course work that allows the developmental student to enroll in its General Psychology and General Sociology classes. General Psychology requires that the student must have passed Reading Comprehension with a "C". General Sociology does not have any pre-requisite for the student to enroll in General Sociology. These two survey classes do not require that the student has passed an upper level writing class, such as English Comp I.

### **Program Goal 3**

The Psychology and Sociology departments will provide course offerings in a timely and sequential manner that allows the student to graduate with an Associates in Psychology or Associates in Social Science and pursue a Bachelor's degree at a 4 year University.

#### **Program Goal 4**

The Psychology and Sociology departments will utilize all means possible to ensure that the student 's experience in the classroom is beneficial, productive and successful. In those situations where the student has complaints about the instructor or the course content, and the instructor is unable to find a solution with the student, the instructor will inform the student of the grievance process and refer the student to the Division Chairperson.

# **Program Data-Psychology**

Goal 3-Program Data-Course Offerings-Psychology-Courses offered

2007	2008	2009	2010	2011
5	4	5	5	5

Goal 3-Program Data-Course Sections offered-Psychology

2007	2008	2009	2010	2011
31	37	33	41	48

# Goal 3-Courses taught Full-Time faculty versus Adjunct faculty

2007	2008	2009	2010	2011
FT credits-57	54	57	78	60
Adjunct-36	57	42	45	84
% FT vs. Adj. 61- 39	49-51	58-42	63-37	42-58

# Goal 3- Graduates in Psychology

2007	2008	2009	2010
6	8	11	13

The National Clearinghouse indicates that our graduates tend to transfer most often to one of these 3 4-year institutions. The institutions are Central Methodist University, Missouri State University, and Missouri University of Science and Technology.

# Program Costs Psychology-Student FYE

2007	2008	2009	2010	2011
1470.60	1404.90	1574.08	1444.82	1298.58

# **Student Data-Psychology**

# Goal 2-Enrollment numbers-Psychology

2007	2008	2009	2010	2011
838	1000	969	1217	1388

# Goal 1-Student Retention-Psychology

2007	2008	2009	2010	2011
82%	83%	93%	94%	92%

# Goal 4-Student Success in the classroom-Psychology-(Success defined by grade of A, B, C)

2007	2008	2009	2010	2011
584= 87%	647=85%	717=86%	945=86%	1019=84%

# **Program Data-Sociology**

# Goal 3- Program Data- Courses Offered Sociology

2007	2008	2009	2010	2011
6	5	5	5	5

# Goal 3- Course Offerings by Sections-Sociology

2007	2008	2009	2010	2011
26	20	22	30	31

# Goal 3- Courses taught by Full-Time vs. Adjunct faculty-Sociology

2007	2008	2009	2010	2011
FT-31	21	36	48	48
Adjunct-45	39	30	42	45
% FT vs. Adj. 41- 59	35-65	55-45	53-47	52-48

# Program Costs-Sociology-Student FYE

2007	2008	2009	2010	2011
1202.08	1301.42	1379.97	1594.40	1557.41

# **Student Data-Sociology**

# Goal 2-Enrollment numbers-Sociology

2007	2008	2009	2010	2011
682	623	630	787	838

# Goal 1- Student Retention-Sociology

2007	2008	2009	2010	2011
83%	82%	81%	78%	80%

# Goal 4-Student Success in the classroom-Sociology-(Success defined by grade of A, B, C)

2007	2008	2009	2010	2011
506=91%	463=90%	465=93%	592=89%	612=89%

# **Assessment Data per courses**

#### **Assessment Plan**

In the Psychology and Sociology department student Assessment in the classroom is measured primarily by administering a pre-test and post-test sequence to determine what the student has learned while taking a particular course offering. In addition to the quantitative data that is collected through the pre and post-test measurement, the Psychology and Sociology department administers a Classroom Assessment Technique or CAT to gain information directly from the student about the course. The CAT asks the student to provide feedback about the course and their level of satisfaction with the course's delivery. We also inquire about the value of the

textbook and the pertinence of the various group and interactive exercises that are used to enhance the content of the course. The department faculty review all of the quantitative and qualitative information gathered and then make appropriate changes to the course offering as indicated. Assessment measurements are to be taken on a 3 year cycle.

# **Pre-Test and Post-Test Measurements by courses**

# Sociology

In the Spring of 2008 a pre-test and post-test sequence was administered in the courses of General Sociology and Introduction to Social Work. General Sociology is a survey class of the field of Sociology. Introduction to Social Work is an upper level class taught to students who are possibly interested in majoring in a Bachelors in Social Work.

In the Introduction to Social Work class there were only 25 students enrolled. Their pre-test and post-test scores are noted below:

Spring of 2008—25 students Pre-Test Average= 48% correct Post-Test Average=80%

In the General Sociology class there were 137 students enrolled in the Spring of 2008. Their pre-test and post-test scores are noted below:

Spring of 2008---137 students Pre-test Average=38% Post-test Average=73%

In the Fall of 2010 and the Spring of 2011 Pre-test and Post-test measurements were administered in the General Sociology classes. The Pre-Test and Post-test scores are noted below:

Fall of 2010—82 students enrolled Pre-Test Average=40% Post-Test Average=65%

Spring of 2011—106 students enrolled Pre-Test Average=40% Post-Test Average=70%

# **Psychology**

Students from 11 sections of General Psychology took the Pre-Test and Post-Test measurements during the 2009-2010 Academic year. The scores from those measurements are noted below:

Fall 2009—228 students enrolled Pre-Test Average=62.2% Post-Test Average=74.5%

Spring 2010—222 Students enrolled Pre-Test Average= 61.5% Post-Test Average=74.4%

#### **Qualitative Data collected to assist with Course Assessment**

A Classroom Assessment Technique (CAT) questionnaire is administered in the last week of class to discover first-hand feedback from the students as to their perceptions of the class, teaching styles, textbook choice, and things they would recommend to make the course more interesting for future students. Here is a sample of the comments collected from previous students.

I liked learning about society through a different perspective. I didn't like all the lecturing.

I liked when we worked in groups. I wish the whole class could be group activities.

What I liked most was how interesting you made the material and the little group activities that were connected to the material. I did not get as much out of the material when there was not an activity connected to it.

I liked the atmosphere of the class the best. I enjoyed that you looked for our ideas on the subject. I would have liked more group work.

I liked the real stories and examples the most, you are a great story teller.

The stories kept me interested. When we talked about child development it kept my interest. The government and economy chapters were my least favorite, but they still caught my interest.

I learned how much a person's background, upbringing, and area in which they live can so greatly affect their future or their outcomes in school and other life activities.

Almost every day when I go home I tell my husband and family what I learned in Sociology class and I have to deal with the fact that our society is more screwed up than I thought.

# **Recommendations and Improvements**

The Program data for both Sociology and Psychology indicate that the department has met the program goals stated earlier. Both programs seem to benefit from the course offerings, the variance in the course scheduling, and the number of sections of each course gives the student body tremendous opportunity to meet their educational goals.

Psychology and Sociology department should continue to assess its survey courses with the pre and post-test measurements in the future. The department needs to work on making sure that all courses offered in each respective discipline have a similar pre-test and post-test format. The use of the CAT technique in each course should be left up to the discretion of each instructor.

Psychology and Sociology department need to find the proper measurements to assess the Common Learning Objectives (CLO) as they pertain to their individual courses. The assessment of the CLO in each course should be coordinated with the other course assessments cycle, every 3 years.

# **SWOT Analysis**

# Strengths

- 1. The Psychology and Sociology departments have designed and implemented their Assessment plans for the past 2 years and have made modifications to the plans driven by data analysis.
- 2. The Psychology and Sociology departments have revised competencies for each course and have imbedded Common Learning Objectives within each competency.
- 3. The Psychology and Sociology departments provide an array of course offerings and have a schedule of course offerings over a 4 semester time frame.
- 4. The Psychology and Sociology departments historically have had high enrollment numbers considering all the course offerings each semester.
- 5. The Psychology and Sociology departments are working towards developing a comprehensive final for introductory level courses to be given by all full-time and adjunct faculty.
- 6. The Psychology and Sociology departments are cost-effective since all course offerings are taught by 3 full-time faculty and many adjunct faculty .

#### Weaknesses

- 1. The Psychology and Sociology departments are staffed with 3 full-time faculty and numerous adjunct faculty to help teach all course offerings each semester.
- 2. The Psychology and Sociology department offerings are "elective" courses in nature, students are not required to take all of the course offerings.
- 3. The Psychology and Sociology departments' reliance on adjunct instruction can influence the consistency in delivery of content and meeting competencies and CLO's in the course.
- 4. The Psychology and Sociology departments' reliance on adjunct instruction can influence the consistency in administrating and following the Assessment plan for each department.
- 5. The Psychology and Sociology departments acknowledge that an Associates of Arts in Social Science with Psychology or Sociology emphasis is not a direct pathway to employment. The student will need a Bachelors Degree to be employable.

# **Opportunities**

1. The Psychology and Sociology departments have initiated articulation agreements with 2+2 programs to assure that students will major in their departments.

- 2. The Psychology and Sociology departments have become required courses for the Nursing Program and other programs on campus as mandated by the State of Missouri.
- 3. The Psychology and Sociology departments need to articulate with 4 year institutions to make the student's transferring more streamlined.

#### **Threats**

- 1. The Psychology and Sociology departments recognize that the emergence of 4 year colleges in the Franklin County area pose a threat to each department's enrollment.
- 2. The Psychology and Sociology departments recognize that State and Federal funding earmarked to promote easy transition from training to employment will impact the enrollments in both departments. (i.e.Training for Tomorrow).
- 3. The Psychology and Sociology departments recognize that the "elective" status of most of its course offerings allows the student to bypass each of these departments and its course offerings.

# **Summary**

In the years from 2007 through 2011, the Psychology and Sociology department have experienced many changes. We lost one faculty member to retirement. We gained 2 new faculty in the Psychology program, one to replace Mr. King the retiree and another faculty member to help with the increase in enrollment at our Satellite campus in Rolla. The Psychology and Sociology departments have strived to become more student-centered in our course offerings, our scheduling of courses, and our attempts to provide a variety of instructional strategies in the classroom to enhance the student's opportunity to be successful. In the past 5 years we have improved upon our assessment plans for the department and for each respective course. We will continue to evaluate and reevaluate our assessment plans, our measures and strategies to meet our Common Learning Objectives, and most importantly our instructional strategies with our student body.

# Program Review Report ECC Psychology/Sociology Programs Completed by the Review Team October 27, 2011

# Psychology and Sociology Departments Program Review 2011 Team:

Program Review Chair: *Brenda Bouse*, Vice President, Career and Outreach, East Central College Review Team Members:

Mary Beth Huxel, ECC Division Chair, Education, Business, and Social Sciences, East Central College

Ms. Elaine Lubbers, Regional Site Coordinator, Central Methodist University

Dr. Nancy Stone, Psychology Department, Missouri S&T

Ms. Alyce Carpenter, Supervisor of the Franklin County Children's Division

# Psychology and Sociology Departments Program Review 2011 Report provided by:

Dr. William J. Cunningham, Associate Professor, Sociology, East Central College

Ms. Wendy Pecka, Psychology Instructor, East Central College

Ms Paula Smith-Culp, Sociology/Psychology Instructor, East Central College

#### I. General Information Overview

The team reviewed the program review report prior to the program review team meeting. The report was prepared and provided by the program faculty and covered information in their departments from 2007-2011. The review team noted that there appears to be a great amount of collaboration amongst the faculty and the students seem to be benefiting from this collaboration and implementation of good classroom strategy. The team also noted that the department has done a good job of offering a high number of sections and has established a good rotation.

# II. Enrollments and Students

# **Analysis**

The team had several questions regarding the data provided.

- An example was regarding Goal 4 under student data for both Psychology and Sociology. The team indicated that the percentages of success in the classroom defined as a obtaining an A, B, or C were very high. The team was able to talk to the faculty once they returned to the review and the faculty clarified that students withdrawing are not included in the percentage therefore providing a higher percentage reported. Also, the faculty indicated that extra credit was a normal practice provided for students.
- One team member commented that when reviewing the student data, she would have liked to have seen the distribution of students, i.e. traditional vs. non-traditional.
- The review team noted that the instructors have internally created pre and post assessment but that they -may want to look at an external assessment-nationally normed. The faculty later confirmed that they have researched but there does not appear to be anything available at this time. The faculty also verified that they are utilizing the CAAP test for students as they complete the program.

• The review team also recommended reviewing other assessments from other programs and comparing the data as well as a syllabus review and testing review from other comparable institutions/courses. After the review it was discovered that the faculty had reviewed a multitude of syllabi when developing the current courses. In 2008 a review of statewide syllabi course offerings and course descriptions for community colleges and four year syllabi was conducted.

- A question on how retention numbers were determined had been asked. The faculty answered that the retention numbers were defined if the students completed the course.
- A recommendation was made by the review team to make sure that adjuncts are also using the assessment; across all courses all sections.
- The review team asked why the percentage is higher in the pre-test in Psychology leading to a smaller growth in percentage growth from the pre-test to post-test? There is growth is smaller than Sociology. Why? The faculty discussed this with the review team and explained that Reading Comprehension at a grade of C is required for Psych and that the data may be skewed because when the assessment was given.
- The review team recommended that the department keep track of where their transfer students go and keep the data.
- The faculty expressed a need to know more about any student grievances regarding the faculty in their department.

# **III.** Program Resources

# Physical, Human and Financial

- Review the percentages of full time faculty to adjuncts and try to increase full time faculty percentage. Only three full time faculty departmental members with one is shared with the ECC Rolla location. In addition, faculty members are carrying overload as well as advising large number of students; over 80 students per faculty member and close to 100 students for two faculty members.
- The review team questioned the amount of financial resources and why there was a difference between Psychology and Sociology noting that Psychology cost per FYE student went down in 2011 and cost per FYE in Sociology had gone up in 2010 and stayed fairly steady in 2011.
- Offices have been relocated and are eliciting an improved collaboration between the full time faculty members.

# IV. Community

# Employment/Transfer Advisory committee role

• The review team recommended that the faculty/department develop an advisory board.

# V. SWOT Analysis/Program Effectiveness

- The review team noted that the viewed the #1 Threat listed on SWOT as a partner opportunity and did not agree with listing the emergence of 4 year colleges in Franklin County as a threat to enrollment.
- The review team questioned whether or not #6 listed on the Strengths section of the SWOT should be listed as Strength. The Strength noted that the department is cost-effective since all course offerings are taught by 3 full-time faculty and many adjunct faculty.

#### VI. Recommendations

The review team recommended the following:

- Drill down on assessments as much as possible.
- Make assessment as part of the overall goals of department or at least making it more prominent in the goals.
- Find an assessment/s to use for majors completing degree programs and work with partner institutions to find the best ones to implement.
- Increase recruitment efforts for program majors.
- Develop a way to capture why students are withdrawing from a course.
- Follow-up Survey to graduates
- Overall commended the faculty for servicing so many students in a multitude of degree programs.

# Health Science Program Review FA 2011

# I) General Program Information

# i. Health Science Department Mission Statement:

The East Central College Health Science department offers course work that provides a good foundation for health studies and encourages critical thinking while promoting interdisciplinary collaboration. The primary role of the Health Science department is to support other health related degree programs.

# ii. Organization and Structure:

The Health Science Department is part of the Science Division. The Science Division encompasses the Biology, Chemistry, Geology, Health Science, Bio Technology, and Chemical Technology departments.

# iii. Staffing and Credentials: Personnel and Facilities

The Health Science Department has one full time instructor and ten adjunct instructors (one adjunct instructor teaches the dual credit Medical Terminology course). Four of the adjunct instructors for the Health Science Department are full-time instructors at East Central College in other departments.

The Medical Terminology and Nutrition courses are offered at both the Union campus and Rolla site, with an online section of each being offered as well. The Basic Principles of Disease and Introduction to Pharmacology courses are currently offered at the Union Campus in the Spring Semester only.

#### iv. External accreditation:

The Health Science Department currently does not have an external accreditation organization.

# II) Learning Outcomes

### i. Program Goals:

The goal of the Health Science department is to deliver current, accurate information to the students. By completing the program review process, we will be able to identify opportunities to better serve our students.

#### ii. Course/Curriculum information:

The Health Science Department's course descriptions are listed in Appendix A. There are currently 4 courses that are under this department.

# iii. Recent Changes/Updates:

- a. Fall 2010: the Health Science Department was established. Nutrition and Medical Terminology courses were both previously part of the Biology Department. An assessment plan was developed for the Medical Terminology course with an assessment tool being used for the first time.
- b. Spring 2011: two new courses were developed under the Health Science Department, Introduction to Pharmacology and Basic Principles of Disease. The Health Information Technology degree was offered for the first time.
- c. Summer 2011: An assessment plan was developed for the Nutrition course and the assessment tool was used for the first time.

# III) Students:

i. Enrollment: Enrollment data was collected for the Health Science Department starting in Fall of 2010 when the Department was created. This data will be used as the baseline data for upcoming academic years.

Department	100000000000000000000000000000000000000										
Department	Enrollment: Headcount					Enrollment: FYE					
	2007	2008	2009	2010	2011	Department	2007	2008	2009	2010	201
	0	0	0	188	683	HS	0.00	0.00	0.00	17.80	65.5
Note: Student count is du	plicated.				19	Note: FYE = Full Year Eq	uivalency; cal	culated by di	viding total o	redits by 30.	
	Cour	se Freque	ncies				Class	Size Distr	ibution		
title	2007	2008	2009	2010	2011	class size	2007	2008	2009	2010	201
# of Courses	0	0	0	3	6	1-10	0	0	0	0	2
# of Sections	0	0	0	6	30	11-15	0	0	0	0	1
# Enrolled	0	0	0	188	683	16-20	0	0	0	0	4
Average Section Size	4		-	31.33	22.77	21-30	0	0	0	2	19
			0	193			0	0	0	4	4
	0	0	U	193	741	31-40	U	u	U		
# of Seats Offered % Seats Filled Note: Arranged sections a	are excluded	pletion &	Withdraw	97.4% vals	92.2%	Over 40 Note: Arranged section	s are excluded	nt by Facu	lty & Adju	mets	
# of Seats Offered % Seats Filled Note: Arranged sections a	are excluded	i.		97.4%		Over 40 Note: Arranged section	s are excluded	L			
# of Seats Offered % Seats Filled Note: Arranged sections a Cos	are excluded	pletion &	Withdraw	97.4% vals	92.2%	Over 40 Note: Arranged section	s are excluded	nt by Facu	lty & Adju	mets	201
# of Seats Offered % Seats Filled Note: Arranged sections a Cou Grades of A, B, C	are excluded urse Com 2007	pletion &	Withdraw 2009	97.4% vals 2010	92.2%	Over 40 Note: Arranged section	s are excluded dits Taugh 2007	nt by Facu 2008	ity & Adju	mets 2010	201
# of Seats Offered % Seats Filled Note: Arranged sections a Cos Grades of A, B, C Grades of D, F	are excluded urse Com 2007	pletion & 2008	Withdraw 2009 0	97.4% vals 2010 149	92.2% 2011 450	Over 40 Note: Arranged section Cre Credits Faculty	s are excluded dits Taugh 2007 0	nt by Facu 2008	2009 0	mets 2010 5	201 35 51
# of Seats Offered % Seats Filled Note: Arranged sections a	urse Com 2007 0	pletion & 2008 0	Withdraw 2009 0	97.4% vals 2010 149 17	92.2% 2011 450 88	Over 40  Note: Arranged section  Cre  Credits Faculty  Credits Adjuncts	s are excluded dits Taugh 2007 0	2008 0	2009 0 0	2010 5	201 35 51 40.7 59.3
# of Seats Offered % Seats Filled Note: Arranged sections a Cos Grades of A, B, C Grades of D, F Withdrawal	are excluded urse Com 2007 0 0	pletion & 2008 0 0 0	Withdraw 2009 0 0	97.4%  vals  2010  149  17  21	92.2% 2011 450 88 97	Over 40  Note: Arranged section  Cre  Credits Faculty  Credits Adjuncts  % Credits Faculty	s are excluded dits Taugh 2007 0	2008 0	2009 0 0	2010 5 12 29.4%	201 35 51 40.7
# of Seats Offered % Seats Filled Note: Arranged sections a  Cot Grades of A, B, C Grades of D, F Withdrawal	are excluded urse Com 2007 0 0	pletion & 2008 0 0 0 0 0	Withdraw 2009 0 0	97.4%  vals  2010  149  17  21	92.2% 2011 450 88 97	Over 40  Note: Arranged section  Cre  Credits Faculty  Credits Adjuncts  % Credits Faculty	s are excluded dits Taugh 2007 0	2008 0	2009 0 0	2010 5 12 29.4%	201 35 51 40.7
# of Seats Offered % Seats Filled Note: Arranged sections a  Cou Grades of A, B, C Grades of D, F Withdrawal % Successful	are excluded urse Com 2007 0 0 - Stude	pletion & 2008 0 0 0 0	Withdraw 2009 0 0 0	97.4%  vals  2010  149  17  21  0.80	92.2% 2011 450 88 97 0.71	Over 40  Note: Arranged section  Cre  Credits Faculty  Credits Adjuncts  % Credits Faculty	s are excluded dits Taugh 2007 0	2008 0	2009 0 0	2010 5 12 29.4%	201 35 51 40.7
# of Seats Offered % Seats Filled Note: Arranged sections a Cos Grades of A, B, C Grades of D, F Withdrawal	are excluded urse Com 2007 0 0 0 . Stude 2007	pletion & 2008 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Withdraw 2009 0 0 0 	97.4%  vals  2010  149  17  21  0.80	92.2% 2011 450 88 97 0.71	Over 40  Note: Arranged section  Cre  Credits Faculty  Credits Adjuncts  % Credits Faculty	s are excluded dits Taugh 2007 0	2008 0	2009 0 0	2010 5 12 29.4%	201 35 51 40.7

Office of Institutional Research, Assessment & Planning

East Central College

ii. Graduates: The Health Science department is a service department. There is an Associates of Arts Degree in Health Science that falls within the realm of the Nursing department. Typically the Health Science majors are students interested in Nursing that are either not currently in the East Central College Nursing Program or are interested in transferring to another institution.

iii. Placement: not applicable

# IV) Advisory Committee Information

i. Minutes, Meetings: None

ii. Membership:

Name	Institution
Mrs. Kamealya Farrell	ECC Health Science Program Coordinator
Dr. Fatemeh Nichols	ECC Science Division Chair
Mrs. Jean McCann	ECC Vice President of Instruction
Mr. John Hardecke	ECC Division Chair English, Foreign Language, Philosophy
Ms. Stephanie Buchholz	ECC Nursing
Mr. David Hood	ECC Business/ HIT Program
Ms. Deborah Schultze	ECC HIT Program Director
Mrs. Natalie Counts	Counts' Fitness
Ms. Ashley Clayton	Missouri Baptist Hospital
Dr. Jody Smith	Saint Louis University

# V) Assessment Plan and Data:

i. Results of the Nutrition Assessment and Medical Terminology Assessment are listed under the Assessment Report tab.

#### ii. Recommendations:

- a. Development of assessment plan and tool for other Health Science Courses.
- b. Topic analysis of each assessment tool to identify areas of improvement in curriculum.
- c. Unification of Nutrition courses.

# iii. Improvements:

- a. Development of the Health Science Department.
- b. Re-evaluate Nutrition curriculum.

# **SWOT Analysis**

- Strengths:
  - Development as a Department.
  - Increase in courses offered.
  - Increase in the sections offered.
  - Offer course in a variety of instruction methods (traditional, web hybrid, online).
  - Service Department for other programs at East Central College.

- Weaknesses:
  - Number of adjuncts teaching courses
  - 1 full time faculty member in the department
- Opportunities:
  - New area that is evolving.
  - Trend in Health Care
- Threats:
  - Trend in Health Care
  - Development of Similar Programs at area Colleges (both degree and certificates).

# Health Science Program Review Report FA 2011

#### I. General Information

The East Central College Health Science department offers course work that provides a good foundation for health studies and encourages critical thinking while promoting interdisciplinary collaboration. The primary role of the Health Science department is to support other health related degree programs.

The Medical Terminology and Nutrition courses are offered at both the Union campus and Rolla site, with an online section of each being offered as well. The Basic Principles of Disease and Introduction to Pharmacology courses are currently offered at the Union Campus in the Spring Semester only.

### II. Enrollments and Students

The statistical data compiled for the Health Science department for the years 2010 through Fall of 2011, show an increase of 27% for the enrollment headcount and the full year equivalency (FYE). The 2010 there were 188 students enrolled in Health Science coursework with an 80% pass rate. In the 2011 there were 683 students enrolled with 71% passing rate.

# **III.** Program Resources

The Health Science Department has one full time instructor and ten adjunct instructors (one adjunct instructor teaches the dual credit Medical Terminology course). Four of the adjunct instructors for the Health Science Department are full-time instructors at East Central College in other departments.

#### IV. Community

There is neither advisory board nor external accreditation for this program. Faculty reported seeking advice from their colleagues at the four-year institutions when making decisions in transfer coursework.

# V. SWOT Analysis

# Strengths, Weaknesses, Opportunities, and Threats

Internal Factors F			External l	Factors
	Strengths	Weaknesses	Opportunities	Threats
0	Development as a department	<ul> <li>Number of adjuncts teaching</li> </ul>	<ul> <li>New area that is evolving.</li> </ul>	° Trend in Health Care
0	Increase in the course offered	courses	° Trend in Health Care	<ul> <li>Development of similar programs</li> </ul>
0	Increase in the section offered			at area Colleges (both degree and
0	Offer course in a variety of instruction methods (traditional, web hybrid, online).			certificates).

#### VI. Recommendations

After an in-depth discussion of the Health Science program, the review team generated the following recommendations. The thrust of the recommendations acknowledges needs to improve assessment practices to determine not only knowledge, but also application skills. There is also a desire on the part of the team to strengthen the curriculum through unifying the course content in the various courses and to create structures that ensure students are better prepared for entry into the program.

- a. Add Reading as a Pre-Requisite for Nutrition
- b. Identify areas of improvement in curriculum
- c. Unification of Nutrition courses
- d. Add application questions to the pre-test and post-test
- e. Make template course and course design to core curriculum
- f. Add a section for Health Science in Foundation Seminar

Submitted by John Hardecke, Division Chair English and Humanities

# Computer Information Systems (CIS) Program Review 2011

Submitted by: Diane Pellin

# I. General Program Information

# A. Mission and Purpose

The mission of the East Central College CIS program is to provide a broad-based foundation in the fundamentals of Computer Information Systems with a concentration on computer network systems and infrastructure. Our primary focus is career and technical education in preparation for real-world career paths. Students will further develop their critical thinking skills in order to hone their ability to work with abstract concepts and perform technical analysis while maintaining strong interpersonal and communication skills with endusers and clients. In terms of general education, CIS provides technical instruction in areas of computer software applications and information management. The program also offers Special Interest and Community courses for work and job improvement in computer hardware, software, programming, and computer networks. Upon completion of the program, students will possess the skills needed for a plethora of career choices such as:

- Help Desk Analyst
- Computer Support Specialist
- Computer Technician
- Technical Support Specialist
- Network Support Specialist
- Network Technician

# **B.** Organization and Structure

The CIS department is now a part of the BEST Division (Business, Education, Social Science, Technology). The division has regularly scheduled meetings throughout the semester. In addition to meeting with the entire division, CIS meets regularly with faculty in the Business Technology department. Department meetings are also held on an as needed basis.

# C. Staffing and Credentials: Personnel, Facilities and Equipment

The CIS department has two full-time instructors, one part time instructor and four adjunct instructors. Three of our adjuncts are currently working in the field. We feel this is very valuable for our students to get this real world perspective. One of our adjuncts is a former full-time instructor in this department who is retired but continues to teach some of our evening courses.

The department has three computer labs: CC127, CC134 and CC226. These labs are equipped with computer systems that are no more than three years old. Each lab has a capacity of 20 students. We use the current Microsoft operating system, Windows 7, and use the current Microsoft Office Suite, 2010. CC226 is the lab that is used for the Cisco networking classes (Network 1, Network 2, Network 3 and Network 4). This lab is equipped with the Cisco router and switch pods that students use to complete hands-on skill exercises in lab. Lab makes up almost 50% of the course requirements for Network 2, Network 3, and Network 4. These computer labs support many other programs on campus as well.

We are an official Cisco Networking Academy and teach the Cisco CCNA (Cisco Certified Network Associate) curriculum in the four Network classes. The Cisco hardware (routers and switches) that is used is current and up to date. We maintain a maintenance agreement with Cisco which allows us overnight service if any of our equipment fails.

We have two VMware servers and two data storage units that provide the virtual environment for our Network Server 1 and 2 classes, Microcomputer Operations class, and the Operating Systems class. This virtual environment allows each student to create their own machine configuration to learn and explore the scope and concepts in each class.

#### D. External Accreditation

There is no external accreditation.

# **II. Learning Outcomes**

# A. Program Goals

The program goals are to provide quality, current instruction in Computer Information Systems for the students.

After completion of an Associate's Degree in Computer Information Systems, graduates will be able to:

- 1. Perform tasks associated with installing, upgrading and maintaining computer network systems
- 2. Troubleshoot and repair computer hardware and software issues
- 3. Create computer programs and web pages
- 4. Customize and manage Windows operating systems
- 5. Develop and maintain database management systems
- 6. Cultivate the skills to spearhead projects from theory to application

#### B. Course/Curriculum Info.

See college catalog

# C. Recent Changes/Updates

Reflected in current college catalog

#### III. Students

The following table summarizes the 180 day report that is sent out by Career Services. Data for 2010/2011, where there was a significant increase in graduates is not available at this time.

		]	East Central (	College En	nployment Su	rvey		
Year	Total Grads	Employed	Employed	Cont. Ed	Cont. Ed	Not	Not	Status
		Related	Not Related		Not Related	Employed	Available	Unknown
06/07	2	2						
07/08	1	1						
08/09	2	1		1				
09/10	2	1		1				
10/11	N/A							

# The following data is from the Office of Institutional Research, Assessment & Planning. Five Year Program Review: Computer Information Systems

No Dual Credit or articulated data are used in this study.

	Enrollment: Headcount					
Department	2007	2008	2009	2010	2011	
CS	676	585	773	1092	1131	

Note: Student count is duplicated.

	Cours	e Freque	ncies		
title	2007	2008	2009	2010	2011
# of Courses	16	12	15	17	20
# of Sections	51	44	51	68	77
# Enrolled	676	585	773	1092	1131
Average Section Size	13.25	13.30	15.16	16.06	14.69
# of Seats Offered	979	799	1021	1377	1454
% Seats Filled	69.1%	73.2%	75.7%	79.3%	77.8%

Note: Arranged sections are excluded.

C	Course Completion & Withdrawals						
	2007	2008	2009	2010	2011		
Grades of A, B, C	417	345	503	721	755		
Grades of D, F	127	125	126	216	169		
Withdrawal	135	120	147	164	220		
% Successful	0.61	0.58	0.65	0.65	0.66		

	Student/Faculty Ratio					
	2007	2008	2009	2010	2011	
Student FYE	66.43	58.83	77.00	103.77	110.57	
Faculty FTE	4.87	4.37	5.07	6.17	7.13	
Student/Faculty Ratio	13.64	13.46	15.19	16.82	15.51	

Note: Faculty FTE = add each course section credit and divide the sum by 30.

Department Costs					
Cost Center	2007	2008	2009	2010	2011
10120 Computer Info Sys	238766	244092	200126	234622	217195
Cost per Student FYE	3594.25	4149.11	2599.04	2260.98	1964.32

Enrollment: FYE						
Department	2007	2008	2009	2010	2011	
CS	66.43	58.83	77.00	103.77	110.57	

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

	Class	Class Size Distribution					
class size	2007	2008	2009	2010	2011		
1-10	17	12	9	10	19		
11-15	10	15	16	10	16		
16-20	22	15	21	42	32		
21-30	2	2	5	6	10		
31-40							
Over 40							

Note: Arranged sections are excluded.

Credits Taught by Faculty & Adjuncts						
	2007	2008	2009	2010	2011	
Credits Faculty	113	101	104	132	136	
Credits Adjuncts	33	30	48	53	78	
% Credits Faculty	77.4%	77.1%	68.4%	71.4%	63.6%	
% Credits Adjuncts	22.6%	22.9%	31.6%	28.6%	36.4%	

# IV. Advisory Committee Info.

On file in the CIS Department

#### V. Assessment Plan and Data

#### A. Assessment Plan

Revised August 2011; May 2011; Revised March 2009; Revised April 2007; November 2006

# <u>Curriculum/coursework</u>

- Specific course descriptions
- Course syllabi with identified course competencies, objectives, and specific assignment rubrics
- General Education requirements included in CS1013 & CS1003
  - o Managing Information Skill Area: Discussion Board exercises, Software Applications exercises, and a cumulative Presentation Assignment or Final Project
  - o Higher Order Thinking Skill Area: Discussion Board exercises; Presentation Assignment or Final Project
- Detailed course calendars and syllabi with course expectations
- Must achieve a minimum of 70% (C grade) in all CS courses

#### Assessment of student achievement

- Formative and summative
  - O Quizzes & Exams over course work; Instructors review results of these measures to examine learning and the need to review or re-teach course material.
  - o Projects reflecting the cumulative learning of courses and/or program
  - o Portfolio development at Program Level in CIS Capstone course
- Internal and external
  - O Course quizzes and exams; Common test banks are used to measure learning on course objectives for all course sections.
  - o Skills Assessment Manager (SAM) pretest and posttest for computer software applications; Application projects assessed with SNAP tool.
  - o CISCO Academy CCNA exams for four courses
  - o Technical Skills Assessment (TSA) is the CISCO Academy exam for CS1263 Network 4
  - o Internship with supervised work experience
  - o Work Keys for Career Readiness certificates
  - o CAAP for Certificates, AAS degrees, and AA degrees

# Assessment of course / curriculum / program achievement

- CIS department meetings, Business & Technology meetings, Division meetings
- Advisory Board meetings and evaluations twice annually
- Students evaluate each course and faculty member each semester
- Faculty driven assessment; all CIS faculty are actively involved and participate

#### Review of Course/Program

- Annual modifications as needed Revise syllabi/expectations/goals;
- Annual completion of Assessment Report for TSA and specific classes as needed

o FA09-SP10 Basic Computer Skills (exit skills results), CS1013 Intro to CIS (pre / posttest results), and TSA graduate results

- o FA10-SP11 CS1163 Network 2 8-week classes and 16-week classes compared and TSA graduate results
- o FA11-SP12 CS1003 Microcomputer Applications (pre / posttest on software applications) and TSA graduate results
- o FA12-SP13 Look at several years of data when we offered two sections of the Network class 1 thru 4
- Systematic Program Review (every 5 years)

# **CIS Competencies:**

- 1. Students will demonstrate the ability to locate, organize, store, retrieve, evaluate, and synthesize information from sources needed to make informed decisions for the completion of a successful project.
- 2. Students will demonstrate the ability to use applications software in spreadsheets, database management, word processing, presentation, and the operating system.
- 3. Students will be able to explain the PC microprocessor and support chips, ROM software, ROM BIOS, utility software and diagnostics, operating system and its functions, networking environment, and peripheral coordination.
- 4. Students will demonstrate the ability to plan, create, test, improve and publish web site files.
- 5. Students will be able to explain network terminology and protocols, network standards, local area networks (LANs), Open System Interconnection (OSI) model, cabling, cabling tools, routers, network devices, Ethernet, and Internet Protocol (IP) addressing.
- 6. Students will be able to explain wide area networks (WANs), transmission control protocol/internet protocol (TCP/IP), IP addressing, routers, router configuration, routing protocols, access control lists (ACLs), switches, and switch configurations,.
- 7. Student will demonstrate the knowledge and skills needed to install, configure, customize, optimize, maintain, and troubleshoot the workstation operating system.
- 8. Students will demonstrate the knowledge and skills needed to manage, install, configure, customize, optimize, network, integrate, and troubleshoot a network using Microsoft server operating system.
- 9. Students will demonstrate the knowledge and skills needed to add dedicated servers and security enhancements to networks using Microsoft server operating system.
- 10. Students will demonstrate their skills and knowledge in a supervised work experience in an information technology environment.

# General Education – Skill Area (CS1013 & CS1003):

#### Higher Order Thinking:

To develop students' ability to distinguish among opinions, facts, and inferences; to identify underlying or implicit assumptions; to make informed judgments; and to solve problems by

applying evaluative standards.

Competencies:

• analyze and synthesize information from a variety of sources and apply the results to resolving complex situations and problems

- defend conclusions using relevant evidence and reasoned argument
- reflect on and evaluate their critical-thinking processes
- recognize the problematic elements of presentations of information and argument and to formulate diagnostic questions for resolving issues and solving problems
- use linguistic, mathematical or other symbolic approaches to describe problems, identify alternative solutions and make reasoned choices among those solutions

# **Managing Information:**

To develop students' abilities to locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions.

Competencies:

- access and/or generate information from a variety of sources, including the most contemporary technological information services
- evaluate information for its currency, usefulness, truthfulness and accuracy
- organize, store and retrieve information efficiently
- present information clearly and concisely, using traditional and contemporary technologies

# VI. Quality Improvement Efforts

The CIS quality improvements are related to student learning, retention and returning adult learners in our program and courses. From 2008 through 2011 with the increased ECC student enrollment, CIS has offered two sections of our major CS courses each semester because of the number of students enrolled as the CIS major. Also, the Network 1 & 2 courses offered 8-week sections in the spring semester to assist new students enrolling in January to be in sequence for future classes. We also expanded our summer offerings to include more CS major courses so that students could remain full-time during the summer. Careful planning, responsible use of resources and effective enrollment management strategies allowed our CIS Program to grow in the last three years.

The CIS department has a part-time lab assistant to ensure that students have access to the lab in CC226 during regularly scheduled times Monday through Friday. This allows students to have access to software, hardware, and tutoring.

# VII. Summary

The CIS Program at East Central College offers instruction in courses that are very current and up to date. Computers in the labs are upgraded every three years through the State of Missouri Enhancement Grant. This allows for a 75/25 match of funds. The computers that are being replaced are then used in other labs, on and off campus, when needed. Equipment

(routers, switches, VM servers) used in the program is also current and obtained through the same enhancement grant funding. Software versions, both application and operating system, are also up to date.

# **SWOT Analysis**

# Strengths, Weaknesses, Opportunities, and Threats

	l Factors	External Factors			
Strengths Weaknesses		Opportunities	Threats		
Sample internal strengths might include a positive community image, high student retention rates; advanced educational facilities, etcinternal strengths represent positive resources and assets.	Sample internal weaknesses might include a negative community image, low student retention rates, outdated educational facilities, etcinternal weaknesses represent a lack of resources and assets.	Sample external opportunities might include an increase in the college tax base, positive economic trends, expanded role and funding of community colleges, etcexternal opportunities represent positive external factors.	Sample external threats might include increasing competition from other education institutions, reductions in educational funding; declining student population, etcexternal threats represent negative external factors.		
1. Up to date equipment available through annual enhancement grants 2. Computer labs that are available to students in all programs 3. Enhanced instructor presentation tools available in all classrooms 4. Temporary, part-time lab assistant to offer support to students in the program 5. Quality of adjuncts teaching our program classes (currently working in the field brings in real world experiences). 6. Active Advisory Council ensures classes taught are what is needed to students seeking AAS degree and certificates. 7. Lecture concepts are enhanced with hands-on experience using networking equipment (routers and switches) and our virtual environment. 8. Night classes are offered to assist area employers who are sending their IT employees for training and updating of their skills. 9. Ability to respond quickly to current needs (software, hardware, industry). 10. Dedicated instructors to the subject matter. 11. Staff located in same area. 12. Related staff meets frequently. 13. Technology that is used in the classroom is updated on a three year rotation.	1. Due to the economy we have an influx of students coming into the program who lack the technology skills necessary to successfully complete entry level classwork.  2. Most of our employed students are part time college students and take more than 2 years to complete the curriculum which affects our retention as well as the number of graduates.  3. Graduation rates are low.  4. Coming up with other indicators of a successful program (employment, employability).  4. The way graduates are tracked needs to be changed to reflect the realities of whom and why people take classes.  5. You only have one instructor that teaches Cisco networking. What happens if she gets hit by a truck?	1. Decline in economy has brought students into the program 2. Working with new instructor at Four-Rivers to give prospective students and better sense of that they are getting into 3. The networking field is still growing and still shows a tremendous need in the industry. 4. Only a handful of community colleges offer a program such as these, even universities don't offer this type of hands on. 5. Companies are impressed with the hands on component of our program elective courses.	1. Due to economy, program is losing funding, budgets are being reduced. 2. Because this program is so skills based, some students are accepting employment in lieu of finishing and obtaining their degree. 3. Department of Higher Education 4. Technology continues to evolve. Be careful that the program keeps up with technology. 5. Concern about the exterior funding issue and misunderstanding of how community colleges serve their students.		

# Computer Information Systems (CIS) Program Review 2011

Submitted by Vince Niehaus

#### **Education:**

The Computer Information System (CIS) offers courses that sequence a student through computer skills for software applications and information management necessary to securing work in the network, technical support/technician or related fields. The program also offers classes to those wishing to update skills in these evolving technical fields. The CIS program is an official Cisco Networking Academy that teaches the Cisco Certified Network Association (CCNA) curriculum in four networking courses. Program goals include applications for each student to:

- a. Install, upgrade, and maintain network systems
- b. Troubleshoot and repair hardware and software issues
- c. Create computer programs and web pages
- d. Develop and maintain database management systems
- e. Teach skills necessary to developing projects

Network (Cisco) curriculum includes courses that provide classroom/laboratory experiences in current and emerging technology that replicate on-the-job learning within the lab under instructor supervision. Instruction includes network terminology and protocols, network standards, network devices, Ethernet, and internet protocol addressing.

Further study in Network 2 immerses students in wide area networks (WANs), transmission control protocol/internet protocol (TCP/IP), IP addressing, routers, router configuration, routing protocols, and access control lists (ACLs).

Network 3 includes reviewing Open System Interconnection (OSI) and Reference Model and OSI layer functions. Study in classroom and field applications develop skills in variable-length subnet masking (VLSM), local area network (LAN), switching, virtual LANs (VLANs), LAN design, interior gateway routing protocol (IGRP), and network management. Particular emphasis challenges students to apply skills learned in prior semesters demonstrating the ability to explain how and why to employ a chosen strategy.

Network 4 advances students into point-to-point protocols (PPPs), network address translation (NAT), integrated services digital network (ISDN), dial-on-demand routing (DDR), frame relays and network management. In a final analysis students prepare for the CCNA exam with the option to prepare for the Network+ Certification exam. The final exam includes studies from Network 1-3.

In addition students take courses in database structure, project management, programming, web page programming, computer hardware, desktop operating systems, network server, program capstone, and internship.

Assessment of student achievement through formative and summative means utilizing both internal and external measures include: coursework quizzes and exams through common test banks used to measure learning of course objectives across all sections, projects demonstrating cumulative learning, portfolio development at program level in CIS capstone course, Skills Assessment Manager (SAM) pretest/post test for computer software, CISCO academy CCNA

exams for four courses, Work Keys for AAS degrees and certificates, Technical Skills Assessment (TSA) Network 4 final and skills assessment, CAAP for AA degrees, and internship with supervised work experience.

CIS meetings, advisory board, student and faculty evaluations, and faculty-driven assessment drive all course/curriculum/program achievement allowing updates that enhance student learning in this competitive field.

# **Advisory Board:**

The CIS advisory board--consisting of 20 members of the community who work in IT or related fields--assembles to offer and discuss possibilities to target for the yearly enhancement grants. The advisory board meets twice a year: once in the fall and once in the spring. Hardware upgrades are necessary every three years to ensure students work with updated versions of equipment used in the field. This advisory board recommended purchasing and using VMWare in the labs to give students experience in the virtual world. CIS currently has two VM servers, two VM data storage units, and a recently purchased VMSphere.

# **Equipment:**

All equipment is Cisco certified for network curriculum course work and is updated or repaired as necessary through a Cisco maintenance agreement allowing for overnight service calls. Presently there are three computer labs equipped with 63 computers, 5 Mac laptops, 5 Windows laptops, 2 instructor PC Tablets, 3 Cisco router/switch bundles, 2 data storage units for the VM environment, and operate with Microsoft Windows 7/Office Suite 2010 with a capacity of 20 students. Labs make up 50% of the course requirements for Network 2, 3, and 4, Network Server 1 and 2, Operating Systems, and Microcomputer Operations. The computer labs support numerous other programs on campus as well.

# **Staffing:**

The CIS department is staffed with two full time instructors, one part time instructor, and four adjunct instructors—three of which work in the field. Field instructors offer the added dimension of updated expertise as well as job site demands that transfer to students through hands-on practical learning applications.

# Areas of Concern:

a. Increased competition from other institutions (St. Charles Community College, Sanford Brown, Linn State, 2 year tech schools)

Two areas to focus upon would be recruiting from high schools and referrals from the college advisors and colleagues channeling potential students into the program who might be interested

i. Need for creating an assessment tool measuring a candidate for the program for entry level skills and imparting some of what is expected in this course of study to the recruits—may include a hands on exam to allow a student to demonstrate practical "street-sense" knowledge of computers

ii. Need for distributing updated information about this CIS program to students enrolled in related courses (computer, web design, graphics, etc.)

- iii. Need for communication with high school instructors/counselors for cooperative effort to send engaged students who exhibit qualifications/interest for this program (perhaps send posters with a set up a QR code included allowing access to the latest updated information about this program)
- b. Address attrition rate with measures that would provide more assistance and time for troubled students to absorb the knowledge necessary to develop skills:
  - i. Augment tutored students with meeting times for remediation by organizing them into study groups (students who may show potential but need more time to learn basic or advanced skills). The time-on-task would allow students as a group to work collaboratively and address a tutor with questions while working on projects, etc.
  - ii. Augment both tutoring and remediation utilizing Moodle for online lessons, discussion forums, chat, etc. allowing all students in all sections to pool information, techniques, or methods learned in order to master tasks.

The success rate for graduates stands as a testimonial to what a student learns upon completion of this program of study. Identifying students who may show interest in this field and offering more varied ways to help those who may feel as though they are in it over their heads are fundamental to growth and success in the CIS program. Designing methods to recruit and creating measures to assess student performance will provide the foundation for further discussion and development of these measures. The CIS program graduated 12 students from the 2010-11 class which demonstrates the success of the instruction and structure that built the program.

#### Graphic Design/Multimedia Program Review 2011

Submitted by: Sean Barton

#### **I General Program Information**

#### **Mission and Purpose**

The Graphic Design Department exists to provide all resources, training and encouragement to meet the needs of the students so they have a well-rounded foundation in all aspects of Graphic Design and Multimedia.

#### **Organization and Structure**

Sean Barton: Instructor/Program Head, Graphic Design

Elizabeth Manhart: Instructional Program Assistant, Graphic Design

Adjunct Faculty (FALL 2011)

Bob Leu: Adjunct Instructor, Graphic Design

Christine Brandt: Adjunct Instructor, Graphic Design/Multimedia

Web specialist

#### **Staffing and Credentials**

Sean Barton: Instructor/Program Head

MFA, Computer Art, 2002, Memphis College of Art, Memphis, TN

BFA, Illustration, 1998, Kansas City Art Institute, Kansas City, MO

Memberships: Graphic Artist Guild, AIGA, College Art Association, National Association of Photoshop Professionals

Elizabeth Manhart: Instructional Program Assistant

MA, Graphic Design, 2011, Savannah College of Art and Design, Savannah, GA

AAS, Graphic Design, 2005, East Central College, Union, MO

BS, Art Education, 1974, Southwest Missouri State University, Springfield, MO

#### **External Accreditation**

None (We are currently working in conjunction with the Fine Art program to achieve NASAD accreditation)

# **II Learning Outcomes**

#### Program Goals/Objectives

After completion of an Associate's of Applied Science Degree in Graphic Design, graduates will be able to:

- 1. Create professional-level design work for a variety of clients
- 2. Communicate clearly on concepts relating to graphic design
- 3. Competently navigate a technology-driven environment in order to create quality design work.
- 4. Utilize both technical and creative assets to best create work the client will desire and use.
- 5. Exhibit a level of professionalism when engaging clients and colleagues in the field

After completion of an Associate's of Applied Science Degree in Multimedia, graduates will be able to:

- 1. Create professional-level multimedia work for a variety of clients
- 2. Communicate clearly on concepts relating to multimedia.
- 3. Competently navigate a technology-driven environment in order to create quality multimedia work.
- 4. Utilize both technical and creative assets to best create work the client will desire and use
- 5. Exhibit a level of professionalism when engaging clients and colleagues in the field

#### Academic Changes

In the last three years, the department has continued to update its curriculum and degree plans according to changes in industry and transfer eligibility. These recent changes are mostly focused on course descriptions and articulations with local high school Career Technical programs. The changes are listed below:

- Complete update of course descriptions and curriculum of both Web Design I and Web Design using Flash.
- Creation of an intermediary course, Web Design II, to replace Web Design using Flash as the required second-level web course on the Multimedia Degree plan.
- Giving the distinction that Web Design using Flash is now an advanced web class that should be only taken as an elective.
- Deactivation of the course, Principles of Production (1 credit hour) and replacing it with Principles of Production (3 credit hour) as an elective accepted from Four Rivers Career Center.
- Revised course description for Digital Video II, indicating focus on video compositing versus video editing.
- Placed Photoshop I as a co-requisite vs. pre-requisite for Digital Photography.
- Updated all Articulations and Degree Plans to reflect changes.

#### Career and Transfer Info

The Graphic Design Department offers only Associate of Applied Science degrees which are considered 'non-transfer' degrees. This means that they do not meet the General Education requirements required by four-year institutions. The AAS degrees in both Graphic Design and Multimedia do cover much of the technical/studio requirements found at other institutions. The AAS degrees along with the Certificates of Achievement (2-year)\* and Specialization (1-year)\* are designed to get students back into the workforce quickly.

UPDATE: 9-22-11 In a meeting today with the transfer admissions coordinator from Webster University, the department was notified that it now has an official articulation agreement with the School of Communications for the BA in Interactive Digital Media, through the Department of Electronic and Photographic Media. This will allow our Multimedia students to transfer

directly to Webster University with at most 32 credit hours they have received here at ECC.

#### Recent Changes/Updates

In addition to the Academic and Curriculum changes listed earlier in this report, the Department has changed in other ways as well. Through generous grants via Perkins and the state of Missouri, we have begun the process of placing our Mac computer labs on a Fibre Optic network. This will allow continued growth and faster render times for large works such as video, compositing, and 3-D imaging. The Multimedia program has begun to shift from analog digital video to completely digital video capture through new cameras. Additional specialty courses such as Package Design, Outdoor Media, Digital Photography, etc, have given students more options when it comes to Studio Electives. Though we've lost our studio space for sound editing and special effects filming/photography, we have still been able to offer students enough open lab time in the computer studios to work on such projects and look forward to garnering a new space soon. Finally, the Department was recently approached by Webster University, St. Louis about creating an articulation between our Multimedia Program and their BA degree in Interactive Digital Media.

#### III Enrollments\*

				No dual cred	it or articulate	d data are used in this study	U				
	Enrolln	nent: Hea	dcount				Enr	ollment: F	YE		
Department	2007	2008	2009	2010	2011	Department	2007	2008	2009	2010	201
GD	347	366	367	395	433	GD	33.80	35.80	36.00	38.07	41.8
Note: Student count is du	plicated.					Note: FYE = Full Year Equ	livalency; calcu	lated by divid	ling total cred	lits by 30.	
	Cours	se Freque	ncies				Class	Size Distri	bution		
title	2007	2008	2009	2010	2011	class size	2007	2008	2009	2010	201
# of Courses	17	18	17	17	17	1-10	9	14	9	15	15
# of Sections	27	31	29	36	38	11-15	9	7	12	12	14
# Enrolled	347	366	367	395	433	16-20	8	7	8	9	9
Average Section Size	12.85	11.81	12.66	10.97	11.39	21-30	1	3	0	0	0
# of Seats Offered	453	511	469	496	567	31-40					
% Seats Filled	76.6%	71.6%	78.3%	79.6%	76.4%	Over 40					
100	ourse Com			2002	2011	Note: Arranged sections	edits Taugh		-	The state of the s	2011
C	ourse Com 2007	2008	2009	2010	2011	Cre	edits Taugh 2007	2008	2009	2010	
Grades of A, B, C	2007 301	<b>2008</b> 316	<b>2009</b> 322	<b>2010</b> 345	391	Credits Faculty	edits Taugh 2007 27	<b>2008</b> 37	<b>2009</b> 37	<b>2010</b> 27	40
Grades of A, B, C Grades of D, F	2007 301 23	2008 316 34	2009 322 42	2010 345 38	391 30	Credits Faculty Credits Adjuncts	2007 27 49	<b>2008</b> 37 52	2009 37 44	2010 27 72	40 65
Grades of A, B, C Grades of D, F Withdrawal	2007 301 23 36	2008 316 34 31	2009 322 42 20	2010 345 38 28	391 30 31	Credits Faculty Credits Adjuncts % Credits Faculty	2007 27 49 35.5%	2008 37 52 41.6%	2009 37 44 45.7%	2010 27 72 27.3%	40 65 38.1
Note: Arranged sections a  Grades of A, B, C  Grades of D, F  Withdrawal  % Successful	2007 301 23	2008 316 34	2009 322 42	2010 345 38	391 30	Credits Faculty Credits Adjuncts	2007 27 49	<b>2008</b> 37 52	2009 37 44	2010 27 72	40 65 38.1
Grades of A, B, C Grades of D, F Withdrawal	2007 301 23 36 0.84	2008 316 34 31	2009 322 42 20 0.84	2010 345 38 28	391 30 31	Credits Faculty Credits Adjuncts % Credits Faculty	2007 27 49 35.5%	2008 37 52 41.6%	2009 37 44 45.7%	2010 27 72 27.3%	40 65 38.1
Grades of A, B, C Grades of D, F Withdrawal % Successful	2007 301 23 36 0.84 Stude: 2007	2008 316 34 31 0.83 nt/Faculty 2008	2009 322 42 20 0.84 Ratio 2009	2010 345 38 28 0.84	391 30 31 0.87	Credits Faculty Credits Adjuncts % Credits Faculty	2007 27 49 35.5%	2008 37 52 41.6%	2009 37 44 45.7%	2010 27 72 27.3%	40 65 38.1
Grades of A, B, C Grades of D, F Withdrawal % Successful	2007 301 23 36 0.84 Stude 2007 33.80	2008 316 34 31 0.83 nt/Faculty 2008 35.80	2009 322 42 20 0.84 Ratio 2009 36.00	2010 345 38 28 0.84 2010 38.07	391 30 31 0.87 2011 41.87	Credits Faculty Credits Adjuncts % Credits Faculty	2007 27 49 35.5%	2008 37 52 41.6%	2009 37 44 45.7%	2010 27 72 27.3%	40 65 38.1
Grades of A, B, C Grades of D, F Withdrawal % Successful Student FYE Faculty FTE	2007 301 23 36 0.84 Stude: 2007	2008 316 34 31 0.83 nt/Faculty 2008	2009 322 42 20 0.84 Ratio 2009	2010 345 38 28 0.84	391 30 31 0.87	Credits Faculty Credits Adjuncts % Credits Faculty	2007 27 49 35.5%	2008 37 52 41.6%	2009 37 44 45.7%	2010 27 72 27.3%	201: 40 65 38.19 61.99
Grades of A, B, C Grades of D, F Withdrawal % Successful	2007 301 23 36 0.84 Stude 2007 33.80	2008 316 34 31 0.83 nt/Faculty 2008 35.80	2009 322 42 20 0.84 Ratio 2009 36.00	2010 345 38 28 0.84 2010 38.07	391 30 31 0.87 2011 41.87	Credits Faculty Credits Adjuncts % Credits Faculty	2007 27 49 35.5%	2008 37 52 41.6%	2009 37 44 45.7%	2010 27 72 27.3%	40 65 38.1
Grades of A, B, C Grades of D, F Withdrawal % Successful  Student FYE Faculty FTE Student/Faculty Ratio	2007 301 23 36 0.84 Stude 2007 33.80 2.53 13.36	2008 316 34 31 0.83 nt/Faculty 2008 35.80 2.97 12.05	2009 322 42 20 0.84  Ratio 2009 36.00 2.70 13.33	2010 345 38 28 0.84 2010 38.07 3.30 11.54	391 30 31 0.87 2011 41.87 3.50	Credits Faculty Credits Adjuncts % Credits Faculty	2007 27 49 35.5%	2008 37 52 41.6%	2009 37 44 45.7%	2010 27 72 27.3%	40 65 38.1
Grades of A, B, C Grades of D, F Withdrawal % Successful  Student FYE Faculty FTE Student/Faculty Ratio	2007 301 23 36 0.84  Stude 2007 33.80 2.53 13.36 ach course sect	2008 316 34 31 0.83 nt/Faculty 2008 35.80 2.97 12.05 tion credit and	2009 322 42 20 0.84  Ratio 2009 36.00 2.70 13.33 d divide the st	2010 345 38 28 0.84 2010 38.07 3.30 11.54	391 30 31 0.87 2011 41.87 3.50	Credits Faculty Credits Adjuncts % Credits Faculty	2007 27 49 35.5%	2008 37 52 41.6%	2009 37 44 45.7%	2010 27 72 27.3%	40 65 38.1
Grades of A, B, C Grades of D, F Withdrawal % Successful  Student FYE Faculty FTE Student/Faculty Ratio Note: Faculty FTE = add each	2007 301 23 36 0.84  Stude 2007 33.80 2.53 13.36 ach course sect	2008 316 34 31 0.83 nt/Faculty 2008 35.80 2.97 12.05	2009 322 42 20 0.84  Ratio 2009 36.00 2.70 13.33 d divide the st	2010 345 38 28 0.84 2010 38.07 3.30 11.54	391 30 31 0.87 2011 41.87 3.50	Credits Faculty Credits Adjuncts % Credits Faculty	2007 27 49 35.5%	2008 37 52 41.6%	2009 37 44 45.7%	2010 27 72 27.3%	40 65 38.1
Grades of A, B, C Grades of D, F Withdrawal % Successful Student FYE Faculty FTE	2007 301 23 36 0.84  Stude 2007 33.80 2.53 13.36 ach course sect	2008 316 34 31 0.83  nt/Faculty 2008 35.80 2.97 12.05 tion credit an	2009 322 42 20 0.84  Ratio 2009 36.00 2.70 13.33 d divide the st	2010 345 38 28 0.84 2010 38.07 3.30 11.54 um by 30.	391 30 31 0.87 2011 41.87 3.50 11.96	Credits Faculty Credits Adjuncts % Credits Faculty	2007 27 49 35.5%	2008 37 52 41.6%	2009 37 44 45.7%	2010 27 72 27.3%	40 65 38.1

<sup>\*</sup>data from the office of Institutional Research

<sup>\*</sup>denotes approximate times it takes to complete certification

# 180-Day Career Services Follow-Up\*

\*statistics from the office of Career Services

#### 2008-2009

PROGRAM*	Total Grads	Employed Related	Employed NOT Related	Employed Related AND Continuing Education Related	Continuing Education Related	Continuing Education NOT Related	Not Employed	Not Available	Status Unknown	Salary Range (Employed Related)	Salary Respondents (Employed Related)	Male	Female
Multi Media Graphic Design	13	2	6	unknown	3	1	1	0	0	\$9.01- \$12.00	2	5	8

#### 2009-2010

Multi Media										60.01			
Graphic	18	6	6	1	3	1	1	0	0	\$9.01-	2	7	11
Design										\$12.00			

2008/2009								
FollowUpSt atus	CTEPlace Relation	PROGRAM	Employer / School (Continuing Education)	Salary Range	Position			
4YR	R	GRAPHIC DESIGN	Continued Education-R @Webster					
4YR	R	GRAPHIC DESIGN	Art Institute of Los Angeles					
EMP	NR	GRAPHIC DESIGN	Randy's Installation	\$8.01- \$9.00	Secretary			
EMP	NR	GRAPHIC DESIGN						
ЕМР	NR	GRAPHIC DESIGN	Bourbeuse Valley Harley- Davidson	\$9.01- \$10.00	Motorclothes Associate			
EMP	NR	GRAPHIC DESIGN						
EMP	R	GRAPHIC DESIGN	Legacy Screen Printing	\$9.01- \$10.00	Art Dept. Assistant			
EMP	R	GRAPHIC DESIGN	Show Me Trophies	\$11.01- \$12.00	Graphic Designer			
ОТН	NR	GRAPHIC DESIGN						
4YR	R	GRAPHIC DESIGN / MULTIMEDIA	Continued Education-R @Savannah College of Art & Design					
ЕМР	NR	GRAPHIC DESIGN / MULTIMEDIA	S.E.S.	\$9.01- \$10.00				
4YR	NR	MULTIMEDIA	University of Missouri					
EMP	NR	MULTIMEDIA	True Manufacturing	\$9.01- \$10.00	Assembly Line Worker			

OTH = Not Employed R=Related
UNK = Data Unavailable NR=Nor Related

EMP = Employed and Continuing Education—Related

NA=Not Available for Placement Employed is always noted before Education, even if it is unrelated

2YR, 4YR, NOC = Continued Education (2 year, 4 year or non-credit schools)

#### **Placement**

Currently, job placement is not a service that the ECC Graphic Design Department offers. Several possible internship plans with various companies in the area in the works, however, at this time, nothing has been finalized. We do, however, utilize the Office of Career Services as often as something comes available.

## **IV Advisory Committee Info**

Minutes and Meetings

Due to the fact that many members of our Advisory Committee are located throughout the United States, we don't have traditional face-to-face meetings. Most discussions regarding the Graphic Design/Multimedia Department are done electronically or through phone conferences. Several members of the Committee who are local have been to the facilities a number of times and are familiar with the programs offered and the technologies used within courses. In the attachment section of this document is one sample of a digital discussion the Committee had over the purchase of new Digital Video equipment.

#### Membership\*

Ben Ziglin-Owner, Ziglin Signs, Washington MO

Elzie Harvey- Owner, Artist, KreateCo, Washington, MO

Angie Meyer- Artist, Production artist, 1Source, Washington, MO

Brad Fairhurst- Art Director, Goodby, Silverstien, & Partners, Detroit, MI

Kim Nakahodo- Communications Manager, City of Blue Springs, Blue Springs, MO

Jed Carter- Co-Founder, Media Artist, MK12, Kansas City, MO

Andrea Hilliard, Videographer, Barry-Wehmiller Companies Inc., St. Louis, MO†

Sean Ramirez, Product Designer, The Bradford Group, Chicago, IL

Jennifer Higerd, Art Faculty, East Central College, Union, MO

Adam Watkins, Art Faculty, East Central College, Union, MO

Neil Nakahodo, Graphic Artist, The Kansas City Star, Kansas City, MO

Robert Colinares, Webster University Student, Creve Cour, MO †

\* Are currently serving or have served on Graphic Design Advisory Committee † ECC Graphic Design Alumni

#### V Assessment Plan 2011-2012 Academic Year-Graphic Design Department

Multimedia Program

Review of data received in 2010 Assessment Report

The Assessment Plan for the 2010 academic year was focused on only one degree plan/course of study within the department. From the beginning it was thought that the Multimedia program needed to be reviewed due to lower enrollment and interest in the program itself. Though it is only one half of the department, it was in more dire need of the most polishing and

review. The assessment tool took on the form of a Reflective assessment questionnaire.\*

#### Learning/Teaching Styles that best worked for the students.

a.	Demonstration/Visual examples	84% positive
b.	Self research	52% positive
c.	Personal Time w/ Instructor	80% positive
d.	text (not available for all classes)	28% positive
e.	team learning	60% positive

#### **Other Relevant Information:**

As per statements made on surveys or in emails sent with surveys

- Several projects need to be reviewed/edited/removed from curriculum
- In equipment--heavy courses, more overview/review of equipment
- Self exploration seems to be more successful than was thought
- Students lack a true multimedia vocabulary/concepts when graduating
- Time management continues to be a huge problem

#### **New Strategies/Adjustments to Program**

- Intro to MM/GD needs more lecture, less projects
- Vocabulary must be integrated and tested for
- Extra work with the equipment in--class
- New projects need to be developed for each class
- Video II becomes more about post--production
- Fully establish a Capstone Rubric for Multimedia Portfolios/Reels
- Pre/Post tests and more written components in all courses
- Include more specific update/progress checks on work in progress

#### a. Actions to be taken in 2011-2012 Academic year

# Common Learning Objectives in the Graphic Design and Multimedia Program SUMMARY:

**Communication:** Our rubric was designed to assess students in their final presentation groups based on the project of an Advertising Campaign. Three areas were focused on in accordance

<sup>\*</sup> Reflective Assessment Questionnaire available in the attachments section.

to the rubric provided; Concept/Clarity of Thought, Structure, and Presentation.

*Critical and Creative Thinking:* Though we currently have no written rubric, each project assigned within the department is subject to a thorough public critique within the class. Not only is technical skill addressed, but concept is a key in all our works. A rubric is currently in the works

*Ethics and Social Responsibility:* We intend to instruct and follow the guidelines set down within the two major organizations affiliated with the Graphic Arts; The Graphic Artist Guild and the AIGA. Both organizations have extensive amounts of information published in their ethics guidebooks. Rolling these philosophies into the existing curriculum is all that's left to do.

• Several projects need to be reviewed/edited/removed from curriculum

#### Projects/Assignments terminated Projects/Assignments Added/Edited

GD1013	Hand-built Advertisement	Vocabulary lists/quizzes
GD1111	Class to be Deactivated	Mac OS curriculum added to GD1013
GD1023	N/A	More emphasis on web-prep for images
GD2451	Creative piece/Standard resume design	Self-promotional piece/Mock interviews w/ unknown interviewers/more creative resume design/Required business card/self I.D. and branding
GD2141	Course deactivated/Kept in Four Rivers articulation as studio elective	N/A
GD2433	Further assignments in Final Cut Pro	Switched to a complete Adobe After Effects curriculum on motion graphics

#### **Intended Program Outcome:**

Upon successful completion of this program, students will be able to:

- Understand creative concepts and exhibit a clear knowledge of each concepts' usefulness in the fields of Graphic Design and Multimedia
- Competently navigate, and utilize the Adobe CS software bundle to create visually attractive, and mentally stimulating works
- Discuss in a knowing manner ideas pertaining to commercial works, client interactions, and final production deadlines
- Showcase advanced problem-solving skills as it pertains to creative concepts, creation and execution of design works, equipment trouble-shooting, and group workflows

#### b. Means of Assessment

Currently, only a few courses have been given their own, specialized assessment tools, including:

- Pre/Post Test Photoshop I
- Vocabulary exams Intro to MM/GD

- Final written exam Working w/ Mac OS X
- Capstone Portfolio Review Technical Skills Assessment
- Reflective Program Survey (Multimedia)

These along with their individual project assignments have been used successfully to ascertain what students are learning and how they are learning it.

#### VI Facilities

Since before 2003, the ECC Graphic Design Department which houses both the Graphic Design program and Multimedia program, has maintained up-to-date hardware and software for student education and training. In conjunction with the latest in Apple and Adobe technologies, the department has continued to provide students with other enhancements to their education.

In 2009, CC122 (the large lab) was re-configured to a front-facing room, allowing installation of 3 more seats for general enrollments. In 2010, both CC122 and CC121 (the small lab) were equipped with new Epson projectors, with HD and True Color technology that allow instructors to conduct more effective critiques of student work. Both labs now host in-ceiling stereo systems for clarity in digital presentations with sound. New color laser printers have been installed, as well as graphic tools such as large format matte cutters and paper trimmers.

In terms of studio work with external media (video, sound, photography, FX lighting, green-screening, etc), we did lose our small studio once located in the MP building. However, we have been able to relocate this equipment into the large lab until such time as a new location for a studio can be found.

In October of 2011, the department will be placed on its own Air Circulation/Conditioning units that will allow regulation of temperatures within our labs. In the past, lack of this has caused some severe damage to sensitive equipment.

Our local network has also continued to grow with the addition of several new servers (Web hosting, Podcasting, Student, DNS, Facutly, Course), 24 Terabytes of storage capacity, backup servers, a Dell Windows server (for web testing and virtualization), and finally, a fully functioning Fiber Optic network connection to both labs. This will allow large media files (Video, Audio, Motion Graphics, 3-D Rendering, etc) to be worked on directly through user accounts without the need for an external support device. \

# VII SWOT Analysis

Strengths

- Equipment/technology is industry standard and made available through Perkins Grants
- Constantly updated courses, reflecting the ever changing field of graphics
- Expert qualified adjunct instructors who bring decades of experience to the table
- Consistent technological updates and maintenance

- Equipment made available for student check-out and use
- New Articulation agreement with Webster University's Interactive Digital Media
- Digital Program combined with Fine Art Program for more well-rounded training
- Ability to grant students ample Open Mac Lab Times so students aren't required to purchase equipment and tech out of their own pocket

#### Weaknesses

- Lack of space to accommodate all equipment needed to be used/taught/needed
- Difficult to find adjunct willing to drive beyond Six Flags in order to teach (gas prices, adjunct pay, number of courses available)
- Students seeking more specialized degree training (video game design, interior design, digital photography, etc) don't see those options begin here
- Students cannot do their work for the college as professional practice anymore
- Recruitment, advertising, building interest in the programs
- Being a one-man-band so to speak. Can't get everything done I'd like to get done.
- Certain projects are dead-on-arrival and no ideas on what to replace them with

#### **Opportunities**

- The new Articulation with Webster University opens the door to future agreements in Graphic Design, Mass Communications, and Art
- Working with Webster University to possibly recruit more adjuncts
- Many alumni working in the field bring the department exposure and contacts

#### **Threats**

- Economic crisis continues nation-wide, cutting budgets both in education and in the private sector. (Commercial arts can be considered a luxury)
- WIA & TRA back-to-work programs for unemployed has run out
- Abnormal ebb and flow of enrollments can lead to hasty cut decisions
- Faculty burn-out
- Critical space constraints impeding ability to offer special topics classes/ assignments
- Anti-education candidates are elected in 2012

#### **Summary**

In the last 3 years, the Graphic Design department, which houses the Graphic Design and Multimedia programs, has grown both in academic scope, as well as in the technological arena. Through generous grant awards from the state of Missouri, we have been able to offer our students the opportunities not found in most Community Colleges or Four-year institutions for that matter. Our technology is second to none and the faculty who guide the students through its creative applications, bring only the best of their skill and knowledge. As proven by our new articulation with Webster University, our curriculum is solid and diverse. Our continued work with the Fine Art program has given our students a strong edge in the world of competitive creativity. We feel that the Graphic Design program has nowhere to go but up and out.

# Graphic Design Program Review Summary FA 2011

#### I. General Information

The Graphic Design department exists to provide all resources, training, and encouragement to meet the educational needs of the students so they may have a well-rounded foundation in all aspects of Graphic Design and Multimedia. The program is currently working in conjunction with the Fine Arts program to achieve NASAD accreditation. The Graphic Design department offers the Associate of Applied Science degree in both Graphic Design and Multimedia. The Certificate of Achievement (2 year) and Specialization (1 year) are also offered. These degrees and certificates are designed to get students back to into the workforce quickly.

#### II. Enrollments and Students

The statistical data compiled for the Graphic Arts department for the years 2007 through Fall 2011, show an increase of 20% for the enrollment headcount and the full year equivalency (FYE). In 2007 there were 347 students enrolled in Graphic Design coursework with an 84% pass rate. In the 2011 there were 433 students enrolled with 87% passing rate.

#### III. Program Resources

The Graphic Design department has one full time instructor who also serves as program coordinator. One full-time Instructional Program Assistant assists with administrative processes and also teaches in the program. Both are credentialed with a Master's degree. There are two adjunct faculty members. The Graphic Design department which houses both the Graphic Design program and Multimedia program has maintained up-to-date hardware and software in the latest Apple and Adobe technologies. In October of 2011, the department will be placed on its own air circulating system to help control temperature and moisture within the lab.

#### IV. Community

Membership of the advisory board is diverse with members from across the state and region. The Graphic Design department utilizes distance technology for most of their advisory board meetings and interactions. Local members have been to facilities a number of times. Some have participated in a variety of student capstone experiences.

#### V. SWOT Analysis

Internal I	Factors	Externa	l Factors
Strengths	Weaknesses	Opportunities	Threats
-Equipment and technology is industry standard -Expert and qualified staff in their field -Articulation agreement with Webster University's Interactive Digital Media -Students have access to equipment -Capstone portfolio review is an effective Assessment strategy	-Space to accommodate changing equipment needs -Difficulty finding qualified adjunct faculty -Recruitment and promotion of the program, particularly Multimedia -Students seek more specialized training	-Further opportunities with Webster University for articulation -Partnering with Webster University to possibly recruit adjunct faculty -Increase alumni participation within the current program	-Economic concerns within the private sector, job placement, and resources -Funding for students being reduced -Political/financial changes in education support

#### VI. Recommendations

The Graphic Design review team has developed the following recommendations:

- 1. Develop and implement an active recruiting plan for the Graphic Design department.
- 2. Develop a plan for needed equipment and space to accommodate current technology over the next three years. Include methods to maximize space by evaluating the current course schedule and lab availability.
- 3. Continue to strengthen relationships with Webster University, Rolla Technical Institute, and Four Rivers Career Center.
- 4. Create a plan to involve alumni in the current programming and/or student activities.

#### Submitted by:

Robyn Walter, MSN, RN, Division Chair Nursing and Allied Health

# Five-Year Program Reviews Data Results

2011

565

1056 53.5%

#### **FIVE YEAR PROGRAM REVIEW: ACCOUNTING**

#### No dual credit or articulated data are used in this study

AC

	Enrollment: Headcount					
Department	2007	2008	2009	2010		
AC	637	545	458	538		

Note: Student count is duplicated.

# of Courses # of Sections # Enrolled Average Section Size # of Seats Offered

% Seats Filled

Cours	e Freque			
2007	2008	2009	2010	2011
13	12	12	10	10
37	38	36	33	34
637	545	458	538	565
47.22	4424	40.70	4 0 20	40.00

1029

44.5%

985

54.6%

Note: Arranged sections are excluded.

986

64.6%

#### **Course Completion & Withdrawals**

977

55.8%

	2007	2008	2009	2010	2011
Grades of A, B, C	438	398	399	467	530
Grades of D, F	84	73	31	52	38
Withdrawal	125	92	62	46	58
% Successful	0.68	0.71	0.81	0.83	0.85

Student/Faculty Ratio							
	2007	2008	2009	2010	2011		
Student FYE	47.50	42.77	38.33	43.20	48.50		
Faculty FTE	2.63	2.67	2.60	2.37	2.47		
Student/Faculty Ratio	18.06	16.02	14.74	18.23	19.64		

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10120 Accounting	139087	141038	151856	150402	151479
Cost per Student EYE	2928.15	3297.59	3961.81	3481.53	3123.28

# Enrollment: FYE Department 2007 2008 2009 2010 2011

38.33

43.20

48.50

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

47.50

#### **Class Size Distribution**

42.77

class size	2007	2008	2009	2010	2011
1-10	8	11	14	2	8
11-15	9	11	9	12	6
16-20	9	10	10	12	9
21-30	8	6	2	7	11
31-40	2	0	1	0	0
Over 40	1	0	0	0	0 ,

Note: Arranged sections are excluded.

#### **Credits Taught by Faculty & Adjuncts**

	2007	2008	2009	2010	2011
Credits Faculty	79	80	78	36	74
Credits Adjuncts	0	0	0	35	0
% Credits Faculty	100.0%	100.0%	100.0%	50.7%	100.0%
% Credits Adjuncts	0.0%	0.0%	0.0%	49.3%	0.0%

#### **FIVE YEAR PROGRAM REVIEW: Art**

#### No dual credit or articulated data are used in this study

Envollment	Hoodoount

Linoiment meadcount							
Department	2007	2008	2009	2010	2011		
AR	620	684	609	783	804		

Note: Student count is duplicated.

Course	<b>Frequencies</b>

title	2007	2008	2009	2010	2011
# of Courses	26	26	26	27	29
# of Sections	35	37	38	49	46
# Enrolled	620	684	609	783	804
Average Section Size	17.71	18.49	16.03	15.98	17.48
# of Seats Offered	1105	1184	1140	1343	1326
% Seats Filled	56.1%	57.8%	53.4%	58.3%	60.6%

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	526	561	496	633	675
Grades of D, F	62	71	59	79	68
Withdrawal	48	59	53	73	67
% Successful	0.83	0.81	0.82	0.81	0.83

#### Student/Faculty Ratio

	2007	2008	2009	2010	2011
Student FYE	61.37	66.43	58.23	74.47	77.00
Faculty FTE	3.27	3.53	3.60	4.53	4.23
Student/Faculty Ratio	18.77	18.82	16.18	16.44	18.20

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10115 Art	151917	172713	211421	208475	180538
Cost per Student FYE	2475.43	2599.92	3630.79	2799.45	2344.65

#### Enrollment: FYE

			–		
Department	2007	2008	2009	2010	2011
AR	61.37	66.43	58.23	74.47	77.00

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### Class Size Distribution

class size	2007	2008	2009	2010	2011
1-10	9	7	6	12	10
11-15	11	12	17	10	5
16-20	4	5	5	15	16
21-30	7	9	10	10	14
31-40	1	2	0	2	1
Over 40	3	2	0	0	0

Note: Arranged sections are excluded.

	2007	2008	2009	2010	2011
Credits Faculty	56	46	46	53	53
Credits Adjuncts	42	60	62	83	74
% Credits Faculty	57.1%	43.4%	42.6%	39.0%	41.7%
% Credits Adjuncts	42.9%	56.6%	57.4%	61.0%	58.3%

2011

2046

2797

73.1%

#### **FIVE YEAR PROGRAM REVIEW: BIOLOGY**

#### No dual credit or articulated data are used in this study

	Enrollment: Headcount					
epartment	2007	2008	2009	2010		
I	2028	2102	2406	2695		

Note: Student count is duplicated.

# of Courses
# of Sections
# Enrolled
Average Section Size
# of Seats Offered

% Seats Filled

Cours	e Freque	ncies		
2007	2008	2009	2010	2011
23	21	20	23	15
100	104	126	142	123
2028	2102	2406	2695	2046
20.28	20.21	19.10	18.98	16.63

2983

80.7%

3239

83.2%

Note: Arranged sections are excluded.

Course	Complet	ion &	Withda	rawals

80.7%

2427 2604

83.6%

	2007	2008	2009	2010	2011
Grades of A, B, C	1390	1550	1752	1986	1536
Grades of D, F	353	213	266	276	239
Withdrawal	287	312	394	441	283
% Successful	0.68	0.75	0.73	0.73	0.75

#### **Student/Faculty Ratio**

	2007	2008	2009	2010	2011
Student FYE	159.83	168.13	190.73	215.23	161.27
Faculty FTE	7.53	7.93	9.57	11.13	9.57
Student/Faculty Ratio	21.23	21.20	19.93	19.34	16.85

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10112 Biology	313908	324766	456903	455478	628309
Cost per Student FYE	1964.01	1931.64	2395.55	2116.24	3896.01

#### **Enrollment: FYE**

Department	2007	2008	2009	2010	2011
BI	159.83	168.13	190.73	215.23	161.27

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	13	16	12	14	30
11-15	12	14	23	23	19
16-20	44	35	44	45	35
21-30	18	24	40	57	38
31-40	7	9	5	1	0
Over 40	6	6	2	2	1 .

Note: Arranged sections are excluded.

#### **Credits Taught by Faculty & Adjuncts**

ordates raught by radaity a Aujanote						
	2007	2008	2009	2010	2011	
Credits Faculty	180	142	210	263	240	
Credits Adjuncts	46	96	77	71	47	
% Credits Faculty	79.6%	59.7%	73.2%	78.7%	83.6%	
% Credits Adjuncts	20.4%	40.3%	26.8%	21.3%	16.4%	

#### **FIVE YEAR PROGRAM REVIEW: BUSINESS**

#### No dual credit or articulated data are used in this study

#### **Enrollment: Headcount**

Department	2007	2008	2009	2010	2011
BU	950	762	710	684	696

Note: Student count is duplicated.

Course	Frequencies

title	2007	2008	2009	2010	2011
# of Courses	16	17	13	14	14
# of Sections	41	39	34	36	35
# Enrolled	950	762	710	684	696
Average Section Size	23.17	19.54	20.88	19.00	19.89
# of Seats Offered	1178	1067	1027	1006	946
% Seats Filled	80.6%	71.4%	69.1%	68.0%	73.6%

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	783	589	557	550	499
Grades of D, F	93	83	97	71	66
Withdrawal	94	81	62	67	60
% Successful	0.81	0.78	0.78	0.80	0.80

#### Student/Faculty Ratio

	2007	2008	2009	2010	2011
Student FYE	97.00	77.00	71.60	69.60	69.80
Faculty FTE	4.10	3.90	3.40	3.60	3.50
Student/Faculty Ratio	23.66	19.74	21.06	19.33	19.94

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10120 Business	97992	98114	94799	104015	97801
Cost per Student FYE	1010.23	1274.21	1324.01	1494.47	1401.16

# Enrollment: FYE

Department	2007	2008	2009	2010	2011
BU	97.00	77.00	71.60	69.60	69.80

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### Class Size Distribution

class size	2007	2008	2009	2010	2011
1-10	6	9	5	9	3
11-15	10	5	6	2	8
16-20	2	7	5	7	7
21-30	14	12	12	17	14
31-40	4	5	4	1	3
Over 40	5	1	2	0	0

Note: Arranged sections are excluded.

	2007	2008	2009	2010	2011		
Credits Faculty	78	54	51	45	60		
Credits Adjuncts	45	63	51	63	45		
% Credits Faculty	63.4%	46.2%	50.0%	41.7%	57.1%		
% Credits Adjuncts	36.6%	53.8%	50.0%	58.3%	42.9%		

#### **FIVE YEAR PROGRAM REVIEW: BUSINESS TECHNOLOGY**

#### No dual credit or articulated data are used in this study

Enrollment:	Headcount

Department	2007	2008	2009	2010	2011
BT	708	565	496	604	552

Note: Student count is duplicated.

title

pircateu.					Note. F
Cours	se Freque	encies			
2007	2008	2009	2010	2011	class size
22	27	18	18	16	1-10

# of Courses	22	27	18	18	16
# of Sections	46	42	37	40	34
# Enrolled	708	565	496	604	552
Average Section Size	15.39	13.45	13.41	15.10	16.24
# of Seats Offered	970	873	778	853	722
% Seats Filled	73.0%	64.7%	63.8%	70.8%	76.5%

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	652	510	431	568	525
Grades of D, F	61	52	65	47	34
Withdrawal	65	37	38	27	46
% Successful	0.84	0.85	0.81	0.88	0.87

#### **Student/Faculty Ratio**

	2007	2008	2009	2010	2011
Student FYE	75.67	59.30	53.00	63.60	61.50
Faculty FTE	4.37	4.10	3.60	3.93	3.33
Student/Faculty Ratio	17.32	14.46	14.72	16.18	18.47

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10120 Business Techno	136493	132430	141022	161337	151689
Cost per Student EYE	1803.79	2233 22	2660.79	2536.75	2466 49

#### **Enrollment: FYE**

Department	2007	2008	2009	2010	2011
ВТ	75.67	59.30	53.00	63.60	61.50

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	13	12	14	9	9
11-15	11	17	9	11	2
16-20	8	5	7	14	8
21-30	14	8	7	6	15
31-40					
Over 40					

Note: Arranged sections are excluded.

#### **Credits Taught by Faculty & Adjuncts**

	2007	2008	2009	2010	2011
Credits Faculty	58	51	63	70	49
Credits Adjuncts	73	72	45	48	51
% Credits Faculty	44.3%	41.5%	58.3%	59.3%	49.0%
% Credits Adjuncts	55.7%	58.5%	41.7%	40.7%	51.0%

#### **FIVE YEAR PROGRAM REVIEW: CHEMISTRY**

#### No dual credit or articulated data are used in this study

#### Enrollment: Headcount

Department	2007	2008	2009	2010	2011	
СН	552	502	568	606	822	

Note: Student count is duplicated.

#### Course Frequencies

title	2007	2008	2009	2010	2011
# of Courses	9	11	11	11	10
# of Sections	35	40	41	43	56
# Enrolled	552	502	568	606	822
Average Section Size # of Seats Offered	15.77	12.55	13.85	14.09	14.68
	809	794	818	782	1134
% Seats Filled	68.2%	63.2%	69.4%	77.5%	72.5%

Note: Arranged sections are excluded.

## Course Completion & Withdrawals

	2007	2008	2009	2010	2011
Grades of A, B, C	392	334	375	420	526
Grades of D, F	68	50	67	63	84
Withdrawal	92	119	126	123	214
% Successful	0.71	0.66	0.66	0.69	0.64

#### Student/Faculty Ratio

			*		
	2007	2008	2009	2010	2011
Student FYE	46.87	42.40	47.73	50.80	68.70
Faculty FTE	2.93	3.37	3.43	3.60	4.67
Student/Faculty Ratio	16.00	12.58	13.92	14.11	14.71

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10114 Chemistry	171331	190783	209300	238890	259076
Cost per Student FYE	3655.45	4499.60	4385.08	4702.56	3771.12

#### Enrollment: FYE

Department	2007	2008	2009	2010	2011
CH	46.87	42.40	47.73	50.80	68.70

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### Class Size Distribution

class size	2007	2008	2009	2010	2011
1-10	8	17	9	12	16
11-15	7	8	14	16	12
16-20	12	7	12	11	22
21-30	8	8	6	4	6
31-40					
Over 40					

Note: Arranged sections are excluded.

	2007	2008	2009	2010	2011
Credits Faculty	59	75	77	70	90
Credits Adjuncts	29	26	26	38	50
% Credits Faculty	67.0%	74.3%	74.8%	64.8%	64.3%
% Credits Adjuncts	33.0%	25.7%	25.2%	35.2%	35.7%

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#### **FIVE YEAR PROGRAM REVIEW: Theater & Communications**

#### No dual credit or articulated data are used in this study

|--|

Department	2007	2008	2009	2010	2011
СТ	1003	984	947	1278	1399

Note: Student count is duplicated.

Course Frequencies
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title	2007	2008	2009	2010	2011
# of Courses	8	5	8	9	9
# of Sections	46	45	48	62	76
# Enrolled	1003	984	947	1278	1399
Average Section Size	21.80	21.87	19.73	20.61	18.41
# of Seats Offered	1101	1083	1065	1535	1645
% Seats Filled	91.1%	90.9%	88.9%	83.3%	85.0%

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	769	733	680	935	1007
Grades of D, F	148	163	183	229	252
Withdrawal	129	118	113	142	154
% Successful	0.74	0.72	0.70	0.72	0.71

#### **Student/Faculty Ratio**

	2007	2008	2009	2010	2011
Student FYE	105.97	101.30	97.40	130.30	142.93
Faculty FTE	4.70	4.50	4.80	6.20	7.60
Student/Faculty Ratio	22.55	22.51	20.29	21.02	18.81

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10112 Theater & Commu	216646	225743	312178	364538	355580
Cost per Student EYE	2044 41	2228 46	3205 11	2797 68	2487 79

**Enrollment: FYE** 

Department	2007	2008	2009	2010	2011
СТ	105.97	101.30	97.40	130.30	142.93

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	3	2	5	5	6
11-15	4	6	4	4	8
16-20	10	9	14	17	32
21-30	26	25	25	34	30
31-40	1	2	0	2	0
Over 40	2	1	0	0	0

Note: Arranged sections are excluded.

#### **Credits Taught by Faculty & Adjuncts**

	2007	2008	2009	2010	2011
Credits Faculty	57	57	84	72	72
Credits Adjuncts	84	78	60	114	156
% Credits Faculty	40.4%	42.2%	58.3%	38.7%	31.6%
% Credits Adjuncts	59.6%	57.8%	41.7%	61.3%	68.4%

#### **FIVE YEAR PROGRAM REVIEW: Computer Information Systems**

#### No dual credit or articulated data are used in this study

<b>Enrollment:</b>	Headcount

Department	2007	2008	2009	2010	2011
CS	676	585	773	1092	1131

Note: Student count is duplicated.

#### **Course Frequencies**

title	2007	2008	2009	2010	2011
# of Courses	16	12	15	17	20
# of Sections	51	44	51	68	77
# Enrolled	676	585	773	1092	1131
Average Section Size	13.25	13.30	15.16	16.06	14.69
# of Seats Offered	979	799	1021	1377	1454
% Seats Filled	69.1%	73.2%	75.7%	79.3%	77.8%

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	417	345	503	721	755
Grades of D, F	127	125	126	216	169
Withdrawal	135	120	147	164	220
% Successful	0.61	0.58	0.65	0.65	0.66

#### **Student/Faculty Ratio**

	2007	2008	2009	2010	2011
Student FYE	66.43	58.83	77.00	103.77	110.57
Faculty FTE	4.87	4.37	5.07	6.17	7.13
Student/Faculty Ratio	13.64	13.46	15.19	16.82	15.51

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10120 Computer Info Sys	238766	244092	200126	234622	217195
Cost per Student FYE	3594.25	4149.11	2599.04	2260.98	1964.32

Enrollment: FYE						
Department	2007	2008	2009	2010	2011	
CS	66.43	58.83	77.00	103.77	110.57	

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	17	12	9	10	19
11-15	10	15	16	10	16
16-20	22	15	21	42	32
21-30	2	2	5	6	10
31-40					
Over 40					

Note: Arranged sections are excluded.

	2007	2008	2009	2010	2011
Credits Faculty	113	101	104	132	136
Credits Adjuncts	33	30	48	53	78
% Credits Faculty	77.4%	77.1%	68.4%	71.4%	63.6%
% Credits Adjuncts	22.6%	22.9%	31.6%	28.6%	36.4%

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#### FIVE YEAR PROGRAM REVIEW: CRIMINAL JUSTICE

#### No dual credit or articulated data are used in this study

<b>Enrollment:</b>	Headcount

Department	2007	2008	2009	2010	2011
CJ	98	103	176	297	271

Note: Student count is duplicated.

Course Frequencies						
title	2007	2008	2009	2010	2011	
# of Courses	6	7	10	11	9	
# of Sections	7	9	12	17	15	
# Enrolled	98	103	176	297	271	
Average Section Size	14.00	11.44	14.67	17.47	18.07	
# of Seats Offered	174	192	276	478	422	
% Seats Filled	56.3%	53.6%	63.8%	62.1%	64.2%	

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	84	82	157	263	218
Grades of D, F	13	14	12	34	29
Withdrawal	7	9	10	14	38
% Successful	0.81	0.78	0.88	0.85	0.76

#### **Student/Faculty Ratio**

	2007	2008	2009	2010	2011
Student FYE	10.30	10.50	17.87	31.50	28.50
Faculty FTE	0.70	0.90	1.17	1.70	1.50
Student/Faculty Ratio	14.71	11.67	15.27	18.53	19.00

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10124 Criminal Justice	13564	16220	23789	34133	32723
Cost per Student EVE	1316.89	1544 76	1331 23	1083 59	1148 18

**Enrollment: FYE** 

Department	2007	2008	2009	2010	2011		
CJ	10.30	10.50	17.87	31.50	28.50		

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	2	4	2	2	2
11-15	3	3	3	3	3
16-20	2	1	6	7	5
21-30	0	1	1	5	5
31-40					
Over 40					

Note: Arranged sections are excluded.

#### **Credits Taught by Faculty & Adjuncts**

			-	·	
	2007	2008	2009	2010	2011
Credits Faculty	0	3	2	0	0
Credits Adjuncts	21	24	33	51	45
% Credits Faculty	0.0%	11.1%	5.7%	0.0%	0.0%
% Credits Adjuncts	100.0%	88.9%	94.3%	100.0%	100.0%

#### **FIVE YEAR PROGRAM REVIEW: EDUCATION**

#### No dual credit or articulated data are used in this study

96

0.82

43

80

56

0.81

#### **Enrollment: Headcount**

Department	2007	2008	2009	2010	2011
ED	494	640	697	734	764

Note: Student count is duplicated.

title	2007	2008	2009	2010	2011
# of Courses	13	15	13	20	20
# of Sections	42	48	42	53	54
# Enrolled	494	640	697	734	764
Average Section Size	11.76	13.33	16.60	13.85	14.15
# of Seats Offered	979	1080	991	1172	1212
% Seats Filled	50.5%	59.3%	70.3%	62.6%	63.0%

Grades of D, F

Withdrawal

% Successful

#### **Course Frequencies**

% Seats Filled	50.5%	59.3%	70.3%	62.6%	63.0%						
Note: Arranged sections are excluded.											
Co	urse Comp	oletion &	Withdrav	vals							
	2007	2008	2009	2010	2011						
Grades of A.B.C	135	555	55/	578	630						

55

0.83

108

41

0.79

#### **Student/Faculty Ratio**

37

0.86

			,		
	2007	2008	2009	2010	2011
Student FYE	43.43	60.27	64.43	65.90	68.07
Faculty FTE	3.10	4.07	3.80	4.50	4.33
Student/Faculty Ratio	14 01	14 81	16.96	14 64	15.72

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10111 Education	197357	233387	269688	273294	271307
Cost per Student EVE	4544.26	3872 36	4185 75	4147 10	3985 71

#### **Enrollment: FYE**

Department	2007	2008	2009	2010	2011
ED	43.43	60.27	64.43	65.90	68.07

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	21	21	7	17	19
11-15	5	4	10	15	12
16-20	10	16	14	11	7
21-30	6	7	11	9	15
31-40	0	0	0	1	1
Over 40	0	0	0	0	0

Note: Arranged sections are excluded.

	2007	2008	2009	2010	2011
Credits Faculty	65	63	66	83	70
Credits Adjuncts	28	59	48	52	60
% Credits Faculty	69.9%	51.6%	57.9%	61.5%	53.8%
% Credits Adjuncts	30.1%	48.4%	42.1%	38.5%	46.2%

#### FIVE YEAR PROGRAM REVIEW: Emergency Medical Technology

#### No dual credit or articulated data are used in this study

Enr	ollmen	t: Hea	dcount

Department	2007	2008	2009	2010	2011
EM	284	255	371	589	585

Note: Student count is duplicated.

Course	

title	2007	2008	2009	2010	2011
# of Courses	13	14	19	20	22
# of Sections	24	23	32	60	56
# Enrolled	284	255	371	589	585
Average Section Size	11.83	11.09	11.59	9.82	10.45
# of Seats Offered	513	501	690	890	944
% Seats Filled	55.4%	50.9%	53.8%	66.2%	62.0%

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	259	306	409	702	669
Grades of D, F	14	3	24	11	27
Withdrawal	11	14	26	45	52
% Successful	0.91	0.95	0.89	0.93	0.89

#### **Student/Faculty Ratio**

	2007	2008	2009	2010	2011
Student FYE	46.32	41.85	44.67	75.50	73.80
Faculty FTE	3.33	3.12	3.98	6.50	5.72
Student/Faculty Ratio	13.91	13.41	11.22	11.62	12.90

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10121 Emergency Medica	106773	113209	165448	193377	163646
G . G. I . EVE	2205 42	2705.44	2702.70	2564.20	2247.42

**Enrollment: FYE** 

Department	2007	2008	2009	2010	2011
EM	46.32	41.85	44.67	75.50	73.80

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	6	9	18	40	25
11-15	14	10	7	5	12
16-20	4	4	3	10	16
21-30	0	0	4	5	3
31-40					
Over 40					

Note: Arranged sections are excluded.

#### Credits Taught by Faculty & Adjuncts

	2007	2008	2009	2010	2011		
Credits Faculty	74	80.5	94.5	104	95.5		
Credits Adjuncts	26	13	25	91	76		
% Credits Faculty	74.0%	86.1%	79.1%	53.3%	55.7%		
% Credits Adjuncts	26.0%	13.9%	20.9%	46.7%	44.3%		

#### FIVE YEAR PROGRAM REVIEW: Physics & Pre-Engineering

#### No dual credit or articulated data are used in this study

#### Enrollment: Headcount

Department	2007	2008	2009	2010	2011
PH	386	317	271	364	347

Note: Student count is duplicated.

#### **Course Frequencies**

title	2007	2008	2009	2010	2011
# of Courses	20	17	15	17	17
# of Sections	29	24	20	25	24
# Enrolled	386	317	271	364	347
Average Section Size	13.31	13.21	13.55	14.56	14.46
# of Seats Offered	648	505	440	578	512
% Seats Filled	59.6%	62.8%	61.6%	63.0%	67.8%

Note: Arranged sections are excluded.

#### Course Completion & Withdrawals

	2007	2008	2009	2010	2011
Grades of A, B, C	265	227	213	300	296
Grades of D, F	9	15	25	33	23
Withdrawal	15	23	33	31	28
% Successful	0.92	0.86	0.79	0.82	0.85

#### Student/Faculty Ratio

	2007	2008	2009	2010	2011
Student FYE	34.73	29.10	24.57	31.03	29.30
Faculty FTE	2.57	2.17	1.83	2.17	2.03
Student/Faculty Ratio	13.51	13.41	13.43	14.30	14.43

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10114 Physics & Pre-Engi	171811	182823	191194	218213	214852
Cost per Student FYE	4947.05	6282.58	7781.60	7032.32	7332.83

#### Enrollment: FYE

Department	2007	2008	2009	2010	2011
PH	34.73	29.10	24.57	31.03	29.30

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### Class Size Distribution

class size	2007	2008	2009	2010	2011
1-10	12	12	8	7	6
11-15	9	2	4	6	9
16-20	1	6	4	10	7
21-30	7	4	4	2	2
31-40	0	0	0	0	0
Over 40					

Note: Arranged sections are excluded.

	2007	2008	2009	2010	2011
Credits Faculty	77	62	52	62	58
Credits Adjuncts	0	3	3	3	3
% Credits Faculty	100.0%	95.4%	94.5%	95.4%	95.1%
% Credits Adjuncts	0.0%	4.6%	5.5%	4.6%	4.9%

#### **FIVE YEAR PROGRAM REVIEW: ENGLISH**

#### No dual credit or articulated data are used in this study

Enrollment: Headcount								
Department	2007	2008	2009	2010	2011			
FN	2474	2573	2701	3746	3778			

Note: Student count is duplicated.

Frequencie	

title	2007	2008	2009	2010	2011
# of Courses	23	24	25	28	29
# of Sections	122	134	147	197	203
# Enrolled	2474	2573	2701	3746	3778
Average Section Size	20.28	19.20	18.37	19.02	18.61
# of Seats Offered	2785	2946	3086	4337	4410
% Seats Filled	88.8%	87.3%	87.5%	86.4%	85.7%

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	1785	1798	1976	2718	2657
Grades of D, F	398	411	430	651	719
Withdrawal	327	400	330	413	438
% Successful	0.71	0.69	0.72	0.72	0.70

#### Student/Faculty Ratio

	2007	2008	2009	2010	2011
Student FYE	253.83	258.43	270.73	375.73	379.13
Faculty FTE	12.23	13.00	14.10	19.10	19.73
Student/Faculty Ratio	20.75	19.88	19.20	19.67	19.22

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10112 English	531432	627541	673847	858927	797511
Cost per Student EYE	2093.65	2428.28	2489.00	2286.02	2103.53

#### **Enrollment: FYE**

Department	2007	2008	2009	2010	2011
EN	253.83	258.43	270.73	375.73	379.13

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	12	15	20	25	22
11-15	13	17	14	17	22
16-20	28	36	44	45	63
21-30	65	66	69	109	96
31-40	4	0	0	1	0
Over 40					

Note: Arranged sections are excluded.

#### **Credits Taught by Faculty & Adjuncts**

	3				
	2007	2008	2009	2010	2011
Credits Faculty	178	234	201	246	286
Credits Adjuncts	189	156	222	327	306
% Credits Faculty	48.5%	60.0%	47.5%	42.9%	48.3%
% Credits Adjuncts	51.5%	40.0%	52.5%	57.1%	51.7%

#### **FIVE YEAR PROGRAM REVIEW: Environmental Science**

#### No dual credit or articulated data are used in this study

#### **Enrollment: Headcount**

Department	2007	2008	2009	2010	2011
ES	59	73	191	192	283

Note: Student count is duplicated.

#### Course Frequencies

title	2007	2008	2009	2010	2011
# of Courses	1	1	1	1	1
# of Sections	3	4	9	8	12
# Enrolled	59	73	191	192	283
Average Section Size	19.67	18.25	21.22	24.00	23.58
# of Seats Offered	75	100	220	219	309
% Seats Filled	78.7%	73.0%	86.8%	87.7%	91.6%

Note: Arranged sections are excluded.

#### Course Completion & Withdrawals

	2007	2008	2009	2010	2011
Grades of A, B, C	48	49	139	146	201
Grades of D, F	3	17	36	30	51
Withdrawal	8	7	16	16	31
% Successful	0.81	0.67	0.73	0.76	0.71

#### Student/Faculty Ratio

	2007	2008	2009	2010	2011
Student FYE	5.90	7.30	19.10	19.20	28.30
Faculty FTE	0.30	0.40	0.90	0.80	1.20
Student/Faculty Ratio	19.67	18.25	21.22	24.00	23.58

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10114 Environmental Sci	0	0	0	0	9578
Cost per Student FYE	0.00	0.00	0.00	0.00	338.45

#### Enrollment: FYE

Department	2007	2008	2009	2010	2011
ES	5.90	7.30	19.10	19.20	28.30

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### Class Size Distribution

class size	2007	2008	2009	2010	2011
1-10					
11-15	1	1	2	0	0
16-20	1	2	1	2	2
21-30	1	1	6	5	10
31-40	0	0	0	1	0
Over 40					

Note: Arranged sections are excluded.

	2007	2008	2009	2010	2011
Credits Faculty	9	6	21	21	30
Credits Adjuncts	0	6	6	3	6
% Credits Faculty	100.0%	50.0%	77.8%	87.5%	83.3%
% Credits Adjuncts	0.0%	50.0%	22.2%	12.5%	16.7%

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#### FIVE YEAR PROGRAM REVIEW: History Political Science Geography

#### No dual credit or articulated data are used in this study

|--|

Department	2007	2008	2009	2010	2011
HI PS GE	1069	1025	1241	1402	1409

Note: Student count is duplicated.

#### **Course Frequencies**

title	2007	2008	2009	2010	2011
# of Courses	10	9	6	6	6
# of Sections	57	57	55	59	56
# Enrolled	1069	1025	1241	1402	1409
Average Section Size	18.75	17.98	22.56	23.76	25.16
# of Seats Offered	1522	1540	1508	1633	1600
% Seats Filled	70.2%	66.6%	82.3%	85.9%	88.1%

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	732	704	871	979	970
Grades of D, F	211	148	183	226	224
Withdrawal	150	115	162	184	161
% Successful	0.67	0.73	0.72	0.70	0.72

#### **Student/Faculty Ratio**

	2007	2008	2009	2010	2011
Student FYE	109.77	101.63	122.43	139.13	139.20
Faculty FTE	5.50	5.50	5.30	5.70	5.40
Student/Faculty Ratio	19.96	18.48	23.10	24.41	25.78

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10114 Hist. & Geog. & PS	217529	211262	233593	238796	228539
Cost per Student FYE	1981.68	2078.74	1907.97	1716.35	1641.80 .

#### **Enrollment: FYE**

Department	2007	2008	2009	2010	2011
HI PS GE	109.77	101.63	122.43	139.13	139.20

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	6	11	7	4	4
11-15	16	8	5	3	3
16-20	10	21	6	9	3
21-30	23	14	29	36	39
31-40	2	3	8	7	7
Over 40					

Note: Arranged sections are excluded.

#### **Credits Taught by Faculty & Adjuncts**

			3 3		
	2007	2008	2009	2010	2011
Credits Faculty	75	99	114	116	93
Credits Adjuncts	90	66	45	55	69
% Credits Faculty	45.5%	60.0%	71.7%	67.8%	57.4%
% Credits Adjuncts	54.5%	40.0%	28.3%	32.2%	42.6%

#### **FIVE YEAR PROGRAM REVIEW: HOSPITALITY**

#### No dual credit or articulated data are used in this study

17

0.84

39

32

0.90

#### **Enrollment: Headcount**

Department	2007	2008	2009	2010	2011
HM	295	247	282	357	333

Note: Student count is duplicated.

Course	Freque	ncies

title	2007	2008	2009	2010	2011
# of Courses	20	20	20	20	22
# of Sections	20	20	22	22	28
# Enrolled	295	247	282	357	333
Average Section Size	14.75	12.35	12.82	16.23	11.89
# of Seats Offered	374	379	377	376	511
% Seats Filled	78.9%	65.2%	74.8%	94.9%	65.2%

% Seats Filled	78.9%	65.2%	74.8%	94.9%	65.2%		
Note: Arranged section	ns are exclud	ed.					
Course Completion & Withdrawals							
	2007	2008	2009	2010	2011		

15

0.92

#### 0.88 Student/Faculty Ratio

23

19

0.85

		ottation accuracy reaction					
	2007	2008	2009	2010	2011		
Student FYE	23.20	19.10	22.07	28.20	25.17		
Faculty FTE	1.50	1.50	1.73	1.73	2.07		
Student/Faculty Ratio	15.47	12.73	12.76	16.30	12.16		

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10120 Hospitality	158742	170261	195132	215218	195896
Cost per Student FYE	6842.33	8914.19	8841.50	7631.84	7782.92

#### **Enrollment: FYE**

Department	2007	2008	2009	2010	2011
HM	23.20	19.10	22.07	28.20	25.17

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	0	5	13	1	12
11-15	14	10	1	13	16
16-20	6	5	8	3	0
21-30	0	0	0	5	0
31-40					
Over 40					

Note: Arranged sections are excluded.

#### **Credits Taught by Faculty & Adjuncts**

	2007	2008	2009	2010	2011
Credits Faculty	29	33	41	33	59
Credits Adjuncts	16	12	11	19	3
% Credits Faculty	64.4%	73.3%	78.8%	63.5%	95.2%
% Credits Adjuncts	35.6%	26.7%	21 2%	36.5%	4.8%

Grades of D, F

Withdrawal

% Successful

#### FIVE YEAR PROGRAM REVIEW: Industrial Engineering

No dual credit or articulated data are used in this study

|--|

Department	2007	2008	2009	2010	2011
IE	151	130	136	205	158

Note: Student count is duplicated.

#### **Course Frequencies**

title	2007	2008	2009	2010	2011
# of Courses	12	12	12	14	13
# of Sections	17	13	15	18	15
# Enrolled	151	130	136	205	158
Average Section Size	8.88	10.00	9.07	11.39	10.53
# of Seats Offered	264	179	193	252	191
% Seats Filled	57.2%	72.6%	70.5%	81.3%	82.7%

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	121	113	131	182	145
Grades of D, F	1	0	0	6	4
Withdrawal	18	17	6	15	9
% Successful	0.86	0.87	0.96	0.90	0.92

#### Student/Faculty Ratio

	2007	2008	2009	2010	2011
Student FYE	14.70	11.70	12.43	18.30	14.60
Faculty FTE	1.60	1.20	1.33	1.60	1.40
Student/Faculty Ratio	9.19	9.75	9.35	11.44	10.43

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10121 Industrial Engine	84670	85624	94684	116702	100347
Cost per Student EYE	5759.86	7318.29	7617.38	6377.16	6873.08

**Enrollment: FYE** 

Department	2007	2008	2009	2010	2011
IE	14.70	11.70	12.43	18.30	14.60

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	12	7	6	4	7
11-15	4	6	9	14	8
16-20	1	0	0	0	0
21-30					
31-40					
Over 40					

Note: Arranged sections are excluded.

#### **Credits Taught by Faculty & Adjuncts**

	2007	2008	2009	2010	2011		
Credits Faculty	39	36	40	39	33		
Credits Adjuncts	9	0	0	9	9		
% Credits Faculty	81.3%	100.0%	100.0%	81.3%	78.6%		
% Credits Adjuncts	18.8%	0.0%	0.0%	18.8%	21.4%		

#### **FIVE YEAR PROGRAM REVIEW: MATHEMATICS**

No dual credit or articulated data are used in this study

## Enrollment: Headcount

Department	2007	2008	2009	2010	2011
MT	2211	2376	2629	3483	3984

Note: Student count is duplicated.

#### **Course Frequencies**

title	2007	2008	2009	2010	2011
# of Courses	17	15	16	17	17
# of Sections	104	114	121	160	192
# Enrolled	2211	2376	2629	3483	3984
Average Section Size	21.26	20.84	21.73	21.77	20.75
# of Seats Offered	2628	2770	3003	3878	4433
% Seats Filled	84.1%	85.8%	87.5%	89.8%	89.9%

Note: Arranged sections are excluded.

# Course Completion & Withdrawals

	2007	2008	2009	2010	2011
Grades of A, B, C	1156	1194	1351	1950	2208
Grades of D, F	664	690	794	879	1058
Withdrawal	410	446	484	651	708
% Successful	0.52	0.51	0.51	0.56	0.56

#### Student/Faculty Ratio

	2007	2008	2009	2010	2011
Student FYE	232.80	249.43	273.90	362.17	415.53
Faculty FTE	10.93	12.07	12.63	16.60	20.03
Student/Faculty Ratio	21.30	20.67	21.60	21.82	20.75

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### Department Costs

Cost Center	2007	2008	2009	2010	2011
10114 Mathematics	452724	530627	538841	722623	734483
Cost per Student EYE	1944.69	2127.36	1967.29	1995.26	1767.58

#### **Enrollment: FYE**

Department	2007	2008	2009	2010	2011
MT	232.80	249.43	273.90	362.17	415.53

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### Class Size Distribution

class size	2007	2008	2009	2010	2011
1-10	16	9	8	6	4
11-15	7	15	8	18	13
16-20	16	23	32	33	79
21-30	59	61	64	98	91
31-40	5	6	8	2	4
Over 40	1	0	1	3	1

Note: Arranged sections are excluded.

	2007	2008	2009	2010	2011
Credits Faculty	250	290	259	331	328
Credits Adjuncts	78	72	120	167	273
% Credits Faculty	76.2%	80.1%	68.3%	66.5%	54.6%
% Credits Adjuncts	23.8%	19.9%	31.7%	33.5%	45.4%

#### **FIVE YEAR PROGRAM REVIEW: MUSIC**

#### No dual credit or articulated data are used in this study

Enrollmen	t: Headcount
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Department	2007	2008	2009	2010	2011
MU	476	470	562	823	891

Note: Student count is duplicated.

<b>Course Frequencies</b>	Course	Freque	ncies
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title	2007	2008	2009	2010	2011
# of Courses	36	24	30	37	45
# of Sections	33	30	34	47	55
# Enrolled	476	470	562	823	891
Average Section Size	14.42	15.67	16.53	17.51	16.20
# of Seats Offered	1959	1028	1449	2089	2470
% Seats Filled	24.3%	45.7%	38.8%	39.4%	36.1%

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	503	511	580	720	798
Grades of D, F	66	63	107	157	161
Withdrawal	55	48	39	73	78
% Successful	0.81	0.82	0.80	0.76	0.77

#### **Student/Faculty Ratio**

	2007	2008	2009	2010	2011
Student FYE	45.17	47.63	55.47	76.47	80.43
Faculty FTE	2.33	2.37	2.60	3.60	4.10
Student/Faculty Ratio	19.39	20.10	21.33	21.24	19.62

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10115 Music	172637	171636	126633	256831	242656
Cost per Student FYE	3821.94	3603.53	2282.91	3358.59	3016.98

#### **Enrollment: FYE**

Department	2007	2008	2009	2010	2011
MU	45.17	47.63	55.47	76.47	80.43

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	12	8	11	16	21
11-15	9	8	3	3	6
16-20	2	5	5	4	3
21-30	7	7	15	22	23
31-40	3	2	0	1	2
Over 40	0	0	0	1	0

Note: Arranged sections are excluded.

#### **Credits Taught by Faculty & Adjuncts**

	2007	2008	2009	2010	2011
Credits Faculty	44	46	42	65	74
Credits Adjuncts	26	25	36	43	49
% Credits Faculty	62.9%	64.8%	53.8%	60.2%	60.2%
% Credits Adjuncts	37.1%	35.2%	46.2%	39.8%	39.8%

#### **FIVE YEAR PROGRAM REVIEW: Nursing**

#### No dual credit or articulated data are used in this study

#### **Enrollment: Headcount**

Department	2007	2008	2009	2010	2011
NR	332	360	388	534	514

Note: Student count is duplicated.

Course	<b>Frequencies</b>

title	2007	2008	2009	2010	2011
# of Courses	13	12	12	12	12
# of Sections	18	18	21	30	29
# Enrolled	332	360	388	534	514
Average Section Size	18.44	20.00	18.48	17.80	17.72
# of Seats Offered	442	468	514	672	721
% Seats Filled	75.1%	76.9%	75.5%	79.5%	71.3%
% Seats Filleu	75.170	70.9%	75.5%	79.5%	71.5%

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	391	338	373	509	488
Grades of D, F	4	12	14	4	6
Withdrawal	18	22	18	32	28
% Successful	0.95	0.91	0.92	0.93	0.93

#### Student/Faculty Ratio

	2007	2008	2009	2010	2011
Student FYE	45.63	46.83	52.73	70.37	67.70
Faculty FTE	2.07	2.12	2.68	3.83	3.73
Student/Faculty Ratio	22.04	22.09	19.68	18.37	18.15

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10121 Nursing	546320	646166	749776	776213	723164
Cost per Student FYE	11972.82	13798.12	14219.15	11030.45	10681.89

Enrollment: FYE					
Department	2007	2008	2009	2010	2011
NR	45.63	46.83	52.73	70.37	67.70

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	0	0	4	2	7
11-15	5	5	4	12	2
16-20	9	2	5	4	11
21-30	4	11	8	12	9
31-40					
Over 40					

Note: Arranged sections are excluded.

	2007	2008	2009	2010	2011
Credits Faculty	62	61.5	72.5	102.5	98
Credits Adjuncts	0	2	8	12.5	14
% Credits Faculty	100.0%	96.9%	90.1%	89.1%	87.5%
% Credits Adjuncts	0.0%	3.1%	9.9%	10.9%	12.5%

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> 33.96 2160

70.7%

#### FIVE YEAR PROGRAM REVIEW: PHYSICAL EDUCATION

#### No dual credit or articulated data are used in this study

Department PE

Enrollment: Headcount							
Department	2007	2008	2009	2010	2011		
PF	1054	1205	1189	1375	1528		

Note: Student count is duplicated.

title # of Courses # of Sections # Enrolled Average Section Size

Course Frequencies						
2007	2008	2009	2010	2011		
14	16	17	16	15		
30	38	38	45	45		
1054	1205	1100	1275	1520		

31.29

3181

37.4%

30.56

2695

51.0%

% Seats Filled Note: Arranged sections are excluded.

# of Seats Offered

35.13

2851

37.0%

**Course Completion & Withdrawals** 

31.71

2988

40.3%

	2007	2008	2009	2010	2011
Grades of A, B, C	541	697	755	816	905
Grades of D, F	41	71	73	93	75
Withdrawal	250	266	234	232	299
% Successful	0.65	0.67	0.71	0.72	0.71

	Student/Faculty Ratio					
	2007	2008	2009	2010	2011	
Student FYE	35.93	43.53	45.00	49.63	58.00	
Faculty FTE	1.10	1.47	1.60	1.70	1.83	
Student/Faculty Ratio	32.66	29.61	28.12	29.19	31.69	

Note: Faculty FTE = add each course section credit and divide the sum by 30.

Department Costs						
Cost Center	2007	2008	2009	2010		

10113 Physical Educatio: 132282 130192 135117 144287 143696 3681.66

Enr	ollment: l	FYE		
2007	2008	2009	2010	2011
35.93	43.53	45.00	49.63	58.00

58.00

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

Class Size Distribution							
class size	2007	2008	2009	2010	2011		
1-10	7	7	10	12	4		
11-15	6	11	6	9	10		
16-20	8	10	8	9	10		
21-30	6	7	9	10	15		
31-40	1	0	2	2	2		
Over 40	2	3	3	3	4		

Note: Arranged sections are excluded.

<b>Credits Taught by Faculty &amp; Adjuncts</b>							
	2007	2008	2009	2010	2011		
Credits Faculty	12	13	11	16	17		
Credits Adjuncts	21	31	37	35	38		
% Credits Faculty	36.4%	29.5%	22.9%	31.4%	30.9%		
% Credits Adjuncts	63.6%	70.5%	77.1%	68.6%	69.1%		

#### **FIVE YEAR PROGRAM REVIEW: Precision Machining**

2011

#### No dual credit or articulated data are used in this study

	LIIIOIIII	ieiit. iiea	ucount		
Department	2007	2008	2009	2010	2011
MA	284	152	218	296	305

Note: Student count is duplicated.

Course Frequencies							
title	2007	2008	2009	2010	2011		
# of Courses	21	22	20	23	22		
# of Sections	46	30	36	38	32		
# Enrolled	284	152	218	296	305		
Average Section Size	6.17	5.07	6.06	7.79	9.53		
# of Seats Offered	653	338	618	702	782		
% Seats Filled	43.5%	45.0%	35.3%	42.2%	39.0%		

Note: Arranged sections are excluded.

Course	Comp	letion	&	Wit	hdı	rav	val	S

	2007	2008	2009	2010	2011
Grades of A, B, C	271	128	206	278	316
Grades of D, F	2	17	3	6	0
Withdrawal	4	6	11	19	7
% Successful	0.98	0.85	0.94	0.92	0.98

#### Student/Faculty Ratio

	2007	2008	2009	2010	2011
Student FYE	15.70	8.93	12.60	16.50	17.40
Faculty FTE	2.60	1.77	1.87	2.03	1.67
Student/Faculty Ratio	6.04	5.05	6.74	8.13	10.42

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
	73968.29	55255.94	76741.02	88279.82	83834.44
Cost per Student FYE	4711.36	6187.68	6090.56	5350.29	4818.07

Enrollment: FYE						
Department	2007	2008	2009	2010	2011	
MA	15.70	8.93	12.60	16.50	17.40	

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

Class Size Distribution							
class size	2007	2008	2009	2010	2011		
1-10	33	23	28	29	17		
11-15	11	7	6	3	5		
16-20	0	0	2	6	10		
21-30	2	0	0	0	0		
31-40							
0							

Note: Arranged sections are excluded.

	2007	2008	2009	2010	2011
Credits Faculty	51	30	39	39	39
Credits Adjuncts	27	23	17	22	11
% Credits Faculty	65.4%	56.6%	69.6%	63.9%	78.0%
% Credits Adjuncts	34.6%	43.4%	30.4%	36.1%	22.0%

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#### **FIVE YEAR PROGRAM REVIEW: PSYCHOLOGY**

No dual credit or articulated data are used in this study

Enrollment: Headcount
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Department	2007	2008	2009	2010	2011
PY	838	1000	969	1217	1388

Note: Student count is duplicated.

	E-111	Omnonti			
Department	2007	2008	2009	2010	2011
PY	87.70	101.83	97.20	123.00	138.80

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

Course Frequencies								
title	2007	2008	2009	2010	2011			
# of Courses	5	4	5	5	5			
# of Sections	31	37	33	41	48			
# Enrolled	838	1000	969	1217	1388			
Average Section Size	27.03	27.03	29.36	29.68	28.92			
# of Seats Offered	1114	1273	1033	1222	1516			
% Seats Filled	75.2%	78.6%	93.8%	99.6%	91.6%			

Note: Arranged sections are excluded.

	elass elle bistilbation								
class size	2007	2008	2009	2010	2011				
1-10	2	1	0	0	0				
11-15	5	9	2	0	4				
16-20	4	3	5	3	4				
21-30	9	10	12	18	21				
31-40	7	9	10	20	13				
Over 40	4	5	4	0	6				

Class Size Distribution

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	584	647	717	945	1019
Grades of D, F	86	113	111	147	190
Withdrawal	121	134	58	71	98
% Successful	0.74	0.72	0.81	0.81	0.78

#### **Credits Taught by Faculty & Adjuncts**

	2007	2008	2009	2010	2011
Credits Faculty	57	54	57	78	60
Credits Adjuncts	36	57	42	45	84
% Credits Faculty	61.3%	48.6%	57.6%	63.4%	41.7%
% Credits Adjuncts	38.7%	51.4%	42.4%	36.6%	58.3%

#### **Student/Faculty Ratio**

	2007	2008	2009	2010	2011
Student FYE	87.70	101.83	97.20	123.00	138.80
Faculty FTE	3.10	3.70	3.30	4.10	4.80
Student/Faculty Ratio	28.29	27.52	29.45	30.00	28.92

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
10114 Psychology	128972	143061	153001	177713	180243
Cost per Student FYE	1470.60	1404.90	1574.08	1444.82	1298.58

#### **FIVE YEAR PROGRAM REVIEW: SOCIOLOGY**

No dual credit or articulated data are used in this study

class size

1-10

11-15 16-20

21-30

31-40

#### **Enrollment: Headcount**

Department	2007	2008	2009	2010	2011
SO	682	623	630	787	838

Note: Student count is duplicated.

Department	2007	2008	2009	2010	2011
SO	68.50	63.20	63.47	79.50	84.30

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Course Frequencies**

title	2007	2008	2009	2010	2011
# of Courses	6	5	5	5	5
# of Sections	26	20	22	30	31
# Enrolled	682	623	630	787	838
Average Section Size	26.23	31.15	28.64	26.23	27.03
# of Seats Offered	743	586	610	826	890
% Seats Filled	91.8%	106.3%	103.3%	95.3%	94.2%

Note: Arranged sections are excluded.

#### **Enrollment: FYE**

**Class Size Distribution** 

2008

0

2009

0

1

8

10

0

2010

17

7

2011

0

5

13

10

Department	2007	2008	2009	2010	2011
SO	68.50	63.20	63.47	79.50	84.30

2007

3

10

5

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	506	463	465	592	612
Grades of D, F	47	46	35	71	70
Withdrawal	56	58	71	92	85
% Successful	0.83	0.82	0.81	0.78	0.80

	2007	2008	2005	2010	2011
Grades of A, B, C	506	463	465	592	612
Grades of D, F	47	46	35	71	70
Withdrawal	56	58	71	92	85
% Successful	0.83	0.82	0.81	0.78	0.80

#### **Credits Taught by Faculty & Adjuncts**

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	2007	2008	2009	2010	2011				
Credits Faculty	31	21	36	48	48				
Credits Adjuncts	45	39	30	42	45				
% Credits Faculty	40.8%	35.0%	54.5%	53.3%	51.6%				
% Credits Adjuncts	59.2%	65.0%	45.5%	46.7%	48.4%				

#### Student/Faculty Ratio

			,		
	2007	2008	2009	2010	2011
Student FYE	68.50	63.20	63.47	79.50	84.30
Faculty FTE	2.53	2.00	2.20	3.00	3.10
Student/Faculty Ratio	27.08	31.60	28.85	26.50	27.19

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

	- 1				
Cost Center	2007	2008	2009	2010	2011
10114 Sociology	82356	82250	87587	126755	131290
Cost per Student FYE	1202.28	1301.42	1379.97	1594.40	1557.41

#### **FIVE YEAR PROGRAM REVIEW: SPANISH**

#### No dual credit or articulated data are used in this study

#### **Enrollment: Headcount**

Department	2007	2008	2009	2010	2011
SP	216	216	172	190	163

Note: Student count is duplicated.

Course Frequencies							
title	2007	2008	2009	2010	2011		
# of Courses	3	3	3	4	3		
# of Sections	13	14	12	13	11		
# Enrolled	216	216	172	190	163		
Average Section Size	16.62	15.43	14.33	14.62	14.82		
# of Seats Offered	316	312	307	323	270		
% Seats Filled	68.4%	69.2%	56.0%	58.8%	60.4%		

Note: Arranged sections are excluded.

#### **Course Completion & Withdrawals**

	2007	2008	2009	2010	2011
Grades of A, B, C	151	156	112	140	117
Grades of D, F	17	36	23	18	21
Withdrawal	46	24	36	30	25
% Successful	0.71	0.72	0.65	0.74	0.72

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	2007	2008	2009	2010	2011
Student FYE	28.97	28.80	22.93	25.33	21.73
Faculty FTE	1.73	1.87	1.60	1.73	1.47
Student/Faculty Ratio	16.75	15.40	14.33	14.64	14.78

Note: Faculty FTE = add each course section credit and divide the sum by 30.

#### **Department Costs**

Cost Center	2007	2008	2009	2010	2011
Cost per Student FYE	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

#### Enrollment: FYE

Department	2007	2008	2009	2010	2011
SP	28.97	28.80	22.93	25.33	21.73

Note: FYE = Full Year Equivalency; calculated by dividing total credits by 30.

#### **Class Size Distribution**

class size	2007	2008	2009	2010	2011
1-10	1	4	4	4	3
11-15	5	2	2	4	2
16-20	4	5	4	3	5
21-30	2	3	2	2	1
31-40	1	0	0	0	0
Over 40					

Note: Arranged sections are excluded.

	2007	2008	2009	2010	2011
Credits Faculty	32	36	32	32	36
Credits Adjuncts	20	20	16	20	8
% Credits Faculty	61.5%	64.3%	66.7%	61.5%	81.8%
% Credits Adjuncts	38.5%	35.7%	33.3%	38.5%	18.2%

# Summary

# **Summary**

This third edition of the ECC Assessment Report captures the depth and scope of assessment activities on campus.

It also demonstrates the need for continued work on the reporting formats, the use and analysis of data, the role of Program Review and voluntary program accreditation and diligence to the use of all of the information for improved student learning.