

Outcome 1	Measurable Criteria	Measurement Tool	Time Frame
Courses offered will meet needs and/or interests of student population.	Number of courses with unmet demand (as indicated by wait lists) will be reduced	Enrollment and waitlist records maintained in division office	Quarterly, reviewed quarterly for possible timely response and annually for budget planning

Results:

	2005 waitlist (duplicated)	2005 enrollment	2006 waitlist (duplicated)	2006 enrollment
Winter 05	Math 94 P (8)	148	EF (7)	165
	Math 98 DEF (13)	247	CDE (6)	248
	Math 99 DE (16)	248	CN (14)	253
	Math 101 DFN (15)	90	1	82
	Math 108 B (10)	137	6	125
	Biol 105 B D (17)	69	3	95
	Biol 125 E I (11)	93	2	71
	Biol 205 C N (34)	69	27	67
	Chem 100 (13)	47	0	55
	Chem 101 (57)	98	34	120
Spring 05	Math 99 D (10)	219	4	217
	Math 107 D (12)	87	0	63
	Math 108 B (13)	127	10	154
	Biol 105 (16)	45	0	77
	Biol 211 (28)	42	6	42
	Chem 100 (13)	48	11	48
	Chem 101 (30)	48	10	67
	E Science (9)	107	4	129
	Geology (8)	72	4	65
Fall 2005	Biol 105 (6)	93	5	96
	Biol 111 (15)	54	0	62
	Biol 205 (42)	144	3	146

Analysis: In every case, courses which carried significant waitlists in 2005 had reduced waitlists in 2006. In many cases this was a result of adding additional sections, and is reflected in increased enrollment for the course. In a few cases, waitlist drop was a result of reduced demand for the course. Waitlists for mid-morning math classes are a function of time and instructor shopping. Biology demand is difficult to address before the new facility.

Action: Purchase of additional equipment allowed a section of Biol 205 to be offered in the Hawks Prairie lab in fall 2006. Chem 100 section is added for fall 2006, winter 2007

Outcome2	Measurable Criteria	Measurement Tool	Time Frame
Division offers a program that supports student retention and success.	Retention and success data for each professor is within department norms	Grade analysis report SM6113 ver10	Reported to FAC's annually
Results Specific to professor, therefore shared with probationary review committee or faculty appraisal committee, but not published here.			
<p>Analysis: Done by committees</p> <p>Action: Based on the results of these reports, some professors have made changes to their classes that have doubled the percent of students retained and successful. This information has also driven professional development activities for professors.</p>			

Outcome 3	Measurable Criteria	Measurement Tool	Time Frame
Students are well-prepared for success on transfer.	Science majors will perform with .5 gpa points of SPSCC course average in science courses at university	MRTE data base	
	After transfer, science majors will report SPSCC science preparation was satisfactory	Transfer survey	
	SPSCC AA graduates will perform as well as graduates of similar programs on the science and critical thinking portions of the exit exam.	MAPP	
<p>Results: a) Neither the previous educational researcher or research analyst provided this regularly. It is not clear whether the information is no longer accessible, or whether it is a matter of having staff with the knowledge and time to retrieve this data.</p> <p>b)) Because of the departure of a faculty contact person, the transfer survey distributed previously at St. Martins and TESC was not sent out. This survey was limited to students enrolled in a science class during the fall at these two campuses, yet many of our science students go on to other institutions. We would like to get feedback from them as well.</p> <p>c)) Some departments within the division previously set assessment measures based on comparing our student outcomes on the exit test with students from similar colleges. While we have finally received some results from the exit test, we still do not have information that allows up to compare our results with other institutions.</p>			
<p>Analysis and Action: a) Pursue this question with the new institutional researcher when this person is on site.</p> <p>b) Retrieve updated email addresses from the SMS for students completing the science majors' sequences. Develop an on-line survey possibly using the "survey monkey" program.</p> <p>c) Discuss at ARC and with institutional researcher when in place.</p>			

Outcome 4	Measurable Criteria	Measurement Tool	Time Frame
All departments within the division will participate in appropriate assessment activities for each AA distribution course	Each department will submit report of assessment	Standard college grid	Annually
<p>Results: Received for Astronomy 105, Biol 105, 125, 170, Botany 101, Environmental Science (1 section only) Not received for Chem 100, Environmental Science (most sections) Geology, Oceanography</p>			
<p>Analysis Participation in assessment activities by adjunct faculty is variable. Some comply faithfully. Others say they participate, but reports have not been received. This is particularly a challenge for discipline areas with no full-time faculty oversight.</p> <p>Action: Continue to request full-time faculty positions in all discipline areas. Full-time faculty leadership in geology/earth sciences and environmental science is especially important to consistent assessment planning and participation.</p>			

Outcome 5	Measurable Criteria	Measurement Tool	Time Frame						
Division assessment activities will produce information that will lead to improved instruction		Review of department reporting grids	Annually						
<p>Results</p> <table border="1" data-bbox="115 1112 1984 1446"> <thead> <tr> <th data-bbox="115 1112 1050 1153">Issue identified</th> <th data-bbox="1050 1112 1984 1153">Action taken</th> </tr> </thead> <tbody> <tr> <td data-bbox="115 1153 1050 1372">Students completing the Horticulture program indicate high level of satisfaction on the exit survey. There continues to be interest in a CAD component to landscape design, but the last several years the course has been offered, enrollment is far below the minimum.</td> <td data-bbox="1050 1153 1984 1372">The Horticulture program is working with the CAD program to integrate our students into a generic CAD class that would allow the assigned project to be in landscape design. A change will be made to the program planning guide.</td> </tr> <tr> <td data-bbox="115 1372 1050 1446">Informal student surveys indicated a need for additional equipment. This year student input indicated the need for microscopes, nursery</td> <td data-bbox="1050 1372 1984 1446">Microscopes, nursery carts, and retail benches were submitted as Perkins equipment requests for 2006-07. These requests have been</td> </tr> </tbody> </table>				Issue identified	Action taken	Students completing the Horticulture program indicate high level of satisfaction on the exit survey. There continues to be interest in a CAD component to landscape design, but the last several years the course has been offered, enrollment is far below the minimum.	The Horticulture program is working with the CAD program to integrate our students into a generic CAD class that would allow the assigned project to be in landscape design. A change will be made to the program planning guide.	Informal student surveys indicated a need for additional equipment. This year student input indicated the need for microscopes, nursery	Microscopes, nursery carts, and retail benches were submitted as Perkins equipment requests for 2006-07. These requests have been
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<p>carts, and retail benches.</p>	<p>approved.</p>
<p>Graduating nursing students and faculty rated their Anatomy and Physiology preparation strong again this year. As the course offerings expand to Hawks Prairie and a hybrid offering, faculty are concerned about maintaining consistency across the program, and want earlier feedback than waiting for the these students to leave the nursing program.</p>	<p>The division secretary will forward syllabi for these courses to the course coordinators as soon as they are received each quarter.</p>
<p>Analysis of common final questions in Math 98 and Math 99 indicate an improvement in student mastery. Fewer concept areas tested low. Faculty say they worked to improve presentation of this material based on feedback from the common final reports. This indicates success of previous action plans. However, they also find the reporting process tedious.</p>	<p>Continue to give the final common questions. Reduce the number of questions reported to focus on those students have historically had difficulty mastering.</p>
<p>Math 98 success rates, which had held at 65% of 10th day enrollment for the previous 3 years, dropped to 61% for 2004-05 and stayed there for 2005-06. The department feels that the new text introduced in fall 2004 is more difficult and includes more extraneous material than the previous text.</p>	<p>Thanks to the efforts of a committee working during 2005-6, a new textbook is in place this fall (2006) for Math 94 and Math 98. We will continue to monitor success rates to see what effect this change has.</p>
<p>A previous assessment noted that many students waited more than one quarter to take the next course in the math sequence. These students had lower rates of success than students who stayed enrolled in the series. An action plan called for enhanced faculty advising within math classes to discourage “stepping out”. For the 2005-06 academic year, the number of students “stepping out” was approximately half what it was two years ago.</p>	<p>Celebrate success! Continue to advise students not to “step out” of the sequence.</p>
<p>Students who take Math 98 with a D in Math 94 have poor success rates. Success dropped from 30% in 2004-5 to 21% in 2005-6. (based on 10th day enrollment) Last year the department changed the</p>	<p>Monitor impact of prerequisite change on success rates in Math 98.</p>

<p>prerequisite for Math 98 to require a minimum grade of C in Math 94. This change was supposed to be effective for fall 06 but will not be enforced until winter quarter 07.</p>	
<p>Although the prerequisite for Math 99 has long required a minimum C grade in Math 98, during the 2005-6 academic year, 25 students with less than a C in Math 98 went on to Math 99. Of these 25 students, only 4 were successful at the C or better level. The bulk of these students took Math 99 during winter quarter 06, and do not appear to have had the prerequisite waived by the instructor.</p>	<p>Follow up with Enrollment Services to diagnose the glitch in their low-grade checking system. Discourage faculty from over-riding prerequisites for students with D grades in prior class.</p>
<p>Students with C in prerequisite course have low success (C or better) rates in Math 98 (33%), 99 (28%), and 120 (55%). Percents based on 40th day enrollment. This performance is worse than the previous year for Math 98 and 99, but improved for Math 120. Faculty report that many of these Math 98 and 99 students do not use the Math Center because it is too crowded with pre-calculus and calculus students, and developmental students do not get attention. Supervision is limited because the Math Center coordinator is a 69-hour employee.</p>	<p>Consider whether a line should be added to the prerequisite to read “B or better recommended.” Continue to lobby for a larger space for the Math Center, or a separate space for upper-level students. When more space is available, consider strategies to encourage this group of students to use the Math Center on a regular basis. Increase the hours of the center coordinator. Propose that time spent in the math center by full-time math faculty count as part of their work plan.</p>
<p>Success in on-line algebra classes is significantly below success in on-campus classes. Based on 10th day enrollment, 33% of on-line Math 98 students were successful compared to 64% of on-campus students. In Math 99, 39% of on-line students were successful compared to 64% of on-campus students.</p>	<p>Study ways to improve on-line instruction, and to better advise students. Compare our success rates with other on-line developmental math classes across the system.</p>
<p>Program questions on student evaluations from chemistry 101 indicate that 1 in 6 students do not feel they are meeting the program goals of seeing connections between science and human activity. Students also continue to report struggling with acid-base concepts. Faculty analysis suggests this may be because these topics come late in the quarter.</p>	<p>A new textbook has been chosen for fall 2006. This text moves the acid-base topics earlier in the course and sets chemistry topics in the context of forensic science. Monitor these indicators to assess impact of change.</p>
<p>Based on data from last fall’s report, the curriculum in Astronomy 105 was enhanced to include more “synthesis promotion topics.” It was</p>	<p>The instructor feels that this result is due to a difference in the student pool and is not the effect of the change in instruction. He will continue</p>

<p>felt that this would improve students' overall scores on higher order thinking questions identified on tests. Student performance dropped from 65.3% to 62.3%, and overall test averages fell as well (from 75.5% to 72.7%)</p>	<p>to include these enhanced topics in his course.</p>
<p>A significant portion of students rated courses below satisfactory on "increasing interest in science" for Oceanography (33%) and Geology 101 (14%). These courses are taught exclusively by adjunct faculty. These numbers underscore the need for improved quality and continuity in this program.</p>	<p>Create full-time geology/earth science professor position. This would also improve participation of this department in assessment activities.</p>
<p>Analysis: Assessment activities within the division are effective in identifying issues and areas for improvement. Action steps do not always result in desired improvements, but this is also documented through assessment activities.</p> <p>Action: Many programs within the division are doing a good job of assessment. Because plans have been in effect for several years now, these plans should be revisited in the 2006-07 academic year. Increased emphasis should be placed on gaining participation from areas where participation is spotty. Stress the importance of full-time faculty leadership in those areas.</p>	