PROGRAM: *Mathematics*

FY 2013: Instructional Five Year Program Review

What is a Program Review?

This program review is a comprehensive study of the quality and cost effectiveness of a particular student and/or academic support service program. The purpose of Sauk's program review process is to promote continuous improvement and to link those improvements to other internal processes, including curriculum development, assessment, budgeting, facility planning, and to the strategic plan through operational plans. Information provided in program reviews will be used in internal reports, reports to other agencies, and for institutional planning. The program review for each area is conducted once every five years as dictated by a schedule created by the Illinois Community College Board (ICCB).

Why is a Program Review necessary?

ICCB requires all academic & cross-disciplinary programs and all student and academic support services to conduct a program review at least once every five years. The program review process should:

- Examine the need for the program, its quality, and its cost of operation.
- Involve employees of the unit as well as individuals not employed within the unit.
- Examine current information and data on enrollment, persistence, retention, and other data.
- Produce results that are considered in operational planning and budget allocation decisions.

The College's annual required *Program Review Report* to the ICCB comes directly from the approved program reviews.

Also, as a part of accreditation, the Higher Learning Commission (HLC) requires institutions to have an established process to regularly review all programs. Each institution is allowed the latitude to develop and administer a review process that is suited to the institution's unique circumstances and needs.

Timeline for the Program Review Process	
April/May	Areas are informed that they are scheduled to conduct a program review in the fall of the next academic year
July-Early September	Optional "early start" is available to areas who want to get the Program Review process started sooner. Area leaders are designated Chair of their program review team. A mandatory orientation will be scheduled and hosted by the Dean of Institutional Research and Planning (IR).
Fall semester	Areas conduct their program reviews using this template. The Dean of IR is always available to answer questions during the review process. Occasionally, rough drafts of the PR document will be requested by the Dean of IR for review to stay apprised of progress.
December 20	**Program reviews and all other required forms are due.** Area leaders are responsible for having their Program Reviews submitted on-time or early.
Fall Semester-March	The college's Program Review Committee will evaluate area program reviews as they are submitted, request revisions, and approve final reviews. Finally, all program reviews must approved by the President.
April 1	Equipment Requests, Personnel Change Requests, and Major Project Requests from ***approved*** program reviews, will be forwarded for consideration using the budget allocation process.
Late April	Instructional areas will submit next year's operational plans, including action items identified in the program review.

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Instructions

- The area will form a program review team comprised of 5 to 10 individuals recommended from the following groups:
  - Area/department faculty or staff
  - Other employees that are outside the department
  - 1 or 2 students
  - Community members and/or industry representatives who are not SVCC employees
- The program review team will complete this template during the review process. Other formats will not be accepted.
- All form areas/questions must be completed (unless specifically noted otherwise).
- Resources needed before the Program Review process begins:
  - Past Operational Plans for your area (last five years)
  - Past Program Review for your area
  - Current FY Operational Plan (they will be modified as the PR process occurs)
  - Access to the College catalog (online)
- **The required ICCB form (found at the end of this template) MUST be completed for each degree or certificate being reviewed**. It is only one page in length. Make copies of the form as needed and insert into this template.
- The ICCB Best Practices Report is optional and may describe the entire unit or a specific practice. If you choose to complete this piece, you should discuss your best practice and supply evidence of its effectiveness.
- Type the names of the program review team on the SIGNATURES AND APPROVAL page and have the team members sign it during your area's first meeting.
- Submit the following by **December 20th** or earlier to the Dean of IR (Steve Nunez):
  - An electronic version of the completed program review template. Do not create a printed copy of the document.
  - The current FY Operational Plan with Program Review modifications added.
  - The completed Signatures and Approval page

- The approval process:
  - Submission of the completed PR template to the Program Review Committee alone does not constitute approval.
  - The Program Review Committee may request additional analysis, clarification, or information, and will not approve the review until it is satisfied that its requests have been addressed
    - Reviews must be approved by the committee and the President *by April 1st* in order for requests to be forwarded for budgetary consideration. Reports submitted after December 20th may not be approved by the Program Review committee by the April 1st deadline which may jeopardize area budgets.

Data forms supplied to you for the Program Review: DT1 (enrollment, completion, and persistence data), DT2 (# declared majors & declared major completions), DT3 (CTE follow-up study), DT4 (program income vs expenses), & DT5 (program staffing).

QUESTIONS: Contact the Program Review Committee Chair, Steve Nunez (ext. 263), with any questions regarding your program review.

PROGRAM: ***Mathematics***

FY 2013: Instructional Five Year Program Review

Alignment with the College Mission

College Mission *Tells who we are as an institution and what we do*

SAUK VALLEY COMMUNITY COLLEGE is an institution of higher education that provides quality learning opportunities to meet the diverse needs of its students and community.

College Vision *Tells where we want to go as an institution*

SAUK VALLEY COMMUNITY COLLEGE will be recognized as a benchmark institution of higher education that provides exceptional learning opportunities in response to the diverse needs of its students and community.

Program Mission

The mission of the SVCC Math Department is to serve a diverse community of students by providing the opportunity to develop effective mathematical understanding and skills that enable them to be successful in more advanced studies, in their careers, and in everyday life..

PART 1: PROGRAM NEED & VIABILITY

The viability component focuses on quantitative analysis for the need for the program(s)

Enrollment, completion, and persistence trends

Insert Data Table 1 here

DATA TABLE 1: Course Enrollment **Discipline Group:** **Mathematics**

Tutorials not included. Honors students included. Honors sections not included.

Row		FY08	FY09	FY10	FY11	FY12	5 Year Total
a	Total Sections Offered	60	59	57	58	58	292
b	Total Enrollment at 10th day	958	940	1066	1052	985	5001
c	Average enrollment for all sections offered at 10th day	16.0	15.9	18.7	18.1	17.0	17.1
d	Proportion of successful completions (A,B,C or P)	62.0%	63.0%	64.0%	63.3%	60.2%	62.5%
e	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	76.7%	78.2%	81.3%	78.6%	80.1%	79.0%
f	Course	MAT 106	MAT 106	MAT 106	MAT 106	MAT 106	
g	Sections	9	11	12	11	11	54
h	Enrollment at 10th day	165	185	247	248	229	1074
i	Average enrollment per section at 10th day	18.3	16.8	20.6	22.5	20.8	19.9
j	Proportion of successful completions (A,B,C or P)	76.4%	66.5%	72.5%	73.8%	72.1%	72.3%
k	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	87.3%	81.1%	86.2%	87.9%	83.8%	85.3%

l	Course	MAT 110	MAT 110	MAT 110	MAT 110	MAT 110	
m	Sections	1	2	2	2	1	8
n	Enrollment at 10th day	23	42	38	34	18	155
o	Average enrollment per section at 10th day	23.0	21.0	19.0	17.0	18.0	19.4
p	Proportion of successful completions (A,B,C or P)	78.3%	88.1%	94.7%	94.1%	83.3%	92.3%
q	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	91.3%	95.2%	97.4%	94.1%	88.9%	95.6%
r	Course	MAT 111	MAT 111	MAT 111	MAT 111	MAT 111	
s	Sections	1	1	2	1	1	6
t	Enrollment at 10th day	21	28	30	34	17	130
u	Average enrollment per section at 10th day	21.0	28.0	15.0	34.0	17.0	21.7
v	Proportion of successful completions (A,B,C or P)	76.2%	85.7%	86.7%	73.5%	64.7%	77.4%
w	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	100.0%	92.9%	96.7%	97.1%	100.0%	97.3%
x	Course	MAT 115	MAT 115	MAT 115	MAT 115	MAT 115	
y	Sections	5	5	6	6	5	27
z	Enrollment at 10th day	119	106	126	106	106	563
aa	Average enrollment per section at 10th day	23.8	21.2	21.0	17.7	21.2	20.9
ab	Proportion of successful completions (A,B,C or P)	71.4%	68.9%	67.5%	63.2%	61.3%	66.5%
ac	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	89.9%	84.0%	92.9%	84.0%	82.1%	86.6%
ad	Course	MAT 121	MAT 121	MAT 121	MAT 121	MAT 121	
ae	Sections	18	12	12	13	13	68
af	Enrollment at 10th day	288	253	283	259	218	1301
ag	Average enrollment per section at 10th day	16.0	21.1	23.6	19.9	16.8	19.1
ah	Proportion of successful completions (A,B,C or P)	47.6%	45.1%	48.4%	46.7%	51.4%	47.8%
ai	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	66.3%	70.4%	70.3%	65.6%	76.6%	69.8%
aj	Course	MAT 122	MAT 122	MAT 122	MAT 122	MAT 122	
ak	Sections	4	5	3	4	5	21
al	Enrollment at 10th day	72	63	46	52	61	294
am	Average enrollment per section at 10th day	18.0	12.6	15.3	13.0	12.2	14.0
an	Proportion of successful completions (A,B,C or P)	69.4%	68.3%	63.0%	65.4%	73.8%	68.0%
ao	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	86.1%	79.4%	84.8%	78.8%	85.2%	82.9%
ap	Course	MAT 150	MAT 150	MAT 150	MAT 150	MAT 150	
aq	Sections	1	1	1	1	1	5
ar	Enrollment at 10th day	5	1	7	9	10	32
as	Average enrollment per section at 10th day	5.0	1.0	7.0	9.0	10.0	6.4

at	Proportion of successful completions (A,B,C or P)	80.0%	100.0%	57.1%	44.4%	70.0%	70.3%
au	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	100.0%	100.0%	100.0%	77.8%	80.0%	91.6%
av	Course	MAT 203	MAT 203	MAT 203	MAT 203	MAT 203	
aw	Sections	5	5	5	5	4	24
ax	Enrollment at 10th day	64	56	67	50	54	291
ay	Average enrollment per section at 10th day	12.8	11.2	13.4	10.0	13.5	12.1
az	Proportion of successful completions (A,B,C or P)	45.3%	55.4%	70.1%	76.0%	61.1%	61.6%
ba	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	56.3%	69.6%	85.1%	80.0%	83.3%	74.9%
bb	Course	MAT 204	MAT 204	MAT 204	MAT 204	MAT 204	
bc	Sections	2	2	2	2	2	10
bd	Enrollment at 10th day	16	14	24	21	18	93
be	Average enrollment per section at 10th day	8.0	7.0	12.0	10.5	9.0	9.3
bf	Proportion of successful completions (A,B,C or P)	37.5%	71.4%	66.7%	52.4%	72.2%	60.0%
bg	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	81.3%	85.7%	79.2%	66.7%	77.8%	78.1%
bh	Course	MAT 205	MAT 205	MAT 205	MAT 205	MAT 205	
bi	Sections	1	1	1	1	1	5
bj	Enrollment at 10th day	7	3	6	11	7	34
bk	Average enrollment per section at 10th day	7.0	3.0	6.0	11.0	7.0	6.8
bl	Proportion of successful completions (A,B,C or P)	100.0%	66.7%	83.3%	100.0%	100.0%	90.0%
bm	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	100.0%	66.7%	100.0%	100.0%	100.0%	93.3%
bn	Course	MAT 211	MAT 211	MAT 211	MAT 211	MAT 211	
bo	Sections	1	1	1	1	1	5
bp	Enrollment at 10th day	8	3	5	8	4	28
bq	Average enrollment per section at 10th day	8.0	3.0	5.0	8.0	4.0	5.6
br	Proportion of successful completions (A,B,C or P)	100.0%	66.7%	100.0%	100.0%	100.0%	93.3%
bs	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	100.0%	66.7%	100.0%	100.0%	100.0%	93.3%
bt	Course	MAT 220	MAT 220	MAT 220	MAT 220	MAT 220	
bu	Sections	3	3	2	2	2	12
bv	Enrollment at 10th day	41	37	24	31	24	157
bw	Average enrollment per section at 10th day	13.7	12.3	12.0	15.5	12.0	13.1
bx	Proportion of successful completions (A,B,C or P)	73.2%	83.8%	62.5%	74.2%	62.5%	71.2%
by	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	87.8%	94.6%	87.5%	80.6%	79.2%	85.9%
bz	Course	MAT 221	MAT 221	MAT 221	MAT 221	MAT 221	

ca	Sections	4	4	3	3	3	17
cb	Enrollment at 10th day	65	70	61	71	54	321
cc	Average enrollment per section at 10th day	16.3	17.5	20.3	23.7	18.0	18.9
cd	Proportion of successful completions (A,B,C or P)	43.1%	42.9%	42.6%	49.3%	40.7%	43.7%
ce	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	47.7%	50.0%	50.8%	59.2%	53.7%	52.3%
cf	Course	MAT 230	MAT 230	MAT 230	MAT 230	MAT 230	
cg	Sections	0	0	0	0	1	1
ch	Enrollment at 10th day	4	3	0	0	5	12
ci	Average enrollment per section at 10th day	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	5.0	12.0
cj	Proportion of successful completions (A,B,C or P)	75.0%	100.0%	0.0%	0.0%	60.0%	78.3%
ck	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	100.0%	100.0%	0.0%	0.0%	80.0%	93.3%
cl	Course	MAT 231	MAT 231	MAT 231	MAT 231	MAT 231	
cm	Sections	0	0	0	0	0	0
cn	Enrollment at 10th day	1	0	0	0	1	2
co	Average enrollment per section at 10th day	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
cp	Proportion of successful completions (A,B,C or P)	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%
cq	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%
cr	Course	MAT 240	MAT 240	MAT 240	MAT 240	MAT 240	
cs	Sections	5	6	5	6	7	29
ct	Enrollment at 10th day	59	76	102	118	159	514
cu	Average enrollment per section at 10th day	11.8	12.7	20.4	19.7	22.7	17.7
cv	Proportion of successful completions (A,B,C or P)	78.0%	89.5%	70.6%	62.7%	47.2%	69.6%
cw	Persistence Rate completions (A,B,C,D,F,P,Q, or I)	81.4%	96.1%	85.3%	82.2%	79.9%	85.0%

College Enrollment	FY08	FY09	FY10	FY11	FY12	5 Year Total
Fall- Students % change (fall to fall)	n/a	-1.8%	-12.7%	0%	-4.7%	-4.8%
Spring- Students % change (spring to spring)	n/a	-2.4%	-8.2%	-6%	-11.5%	-7.0%

1. Using data table 1, *describe* the five-year enrollment trends in the program and in specific classes if different than the program as a whole. If possible, *explain* the enrollment trends.

Enrollment dropped slightly from FY 08 to FY 09, and then saw a 14% increase in FY 10, when the college was experiencing an overall decrease in enrollment. Enrollment generally remained higher than average in FY 11, and then fell 6% in FY 12. The decrease in math enrollment followed the overall trend in college enrollment.

For most individual classes the pattern was roughly similar. Significant exceptions are noted below.

The math education courses, MAT 110 and 111, experienced a higher enrollment in FY 09 and a much lower enrollment in FY 12 than the general trend.

MAT 121 experienced a sharper decline in FY 12 than the general trend. MAT 122's enrollment numbers were almost the reverse of the general trend. They declined steadily from FY 08 to FY 10 and then rose again from FY 10 to FY 12.

It is difficult to make generalizations from classes with low enrollments such as MAT 150, 204, 205, 211, 230, and 231 but for many of them the lowest enrollment came in FY 09.

Of the math courses taken mainly by those in business fields, MAT 220 and MAT 221 both had unusually low enrollments in FY 10, which was the highest enrollment year for the program overall, while MAT 240 has been growing steadily every year.

The enrollment decrease in MAT 121 may be due to the fact that it is no longer a prerequisite for MAT 240.

The decrease in MAT 110 and 111 enrollment is consistent with the decrease in Education majors at Sauk in the same time period.

2. Use data table 1. For each class listed, is the <u>average 10th day enrollment</u> equal to or greater than 10 students? If the average enrollment is below 10 students, please *justify* the small class size.

The classes with an average 10th day enrollment of less than 10 students are: MAT 150, 204, 205, 211, 230, and 231.

MAT 150 is combined with CIS 207, and the combined enrollment averages above 10 per section.

The others are advanced courses that meet program requirements for various STEM fields. They must be offered regardless of enrollments.

3. Using data table 1, *describe* the five-year <u>successful program completion trends</u> (students pass the class with A, B, C or P grades) <u>and</u> course completion trends if different than the program as a whole. If possible, *explain* the completion trends.

The program completion rates are stable at about 62% with only minor variations from year to year. However, the completion rates for individual classes vary widely from course to course.

MAT 115 has experienced a gradual decline in completion rates over the five years. One possible partial explanation is some changes we made to more closely align the course content with IAI expectations. We will keep monitoring the completion rates to see if the trend continues or improves.

The two lowest completion rates are for MAT 121 and MAT 221. Both require a significant mastery of previously learned skills. MAT 121 in particular is the "capstone" course for several years of algebra.

More advanced math courses like MAT 122 and MAT 203 that focus on newer skills or draw students who intend to continue taking math courses have higher completion rates.

The low completion rates in MAT 121 mirror national trends; a 2007 MAA study found that less than 55% of the students in College Algebra courses nationwide successfully complete the course. The math department has been exploring ways to improve this rate for several years. We have made changes to the content, to the course final exam, and monitor student progress carefully from year to year. Thus far, we have not found a way to impact the completion rate significantly. We have monitored placement cut scores and prerequisites and are considering possible adjustments.

4. Using data table 1, *describe* the five-year persistence rate trends for the program (students remain in the class and receive grades of A-F, P, Q, or I) and course persistence trends if different than the program as a whole. If possible, *explain* the course persistence trends.

The department persistence rates are stable at about 79%.

MAT 121 and MAT 221 both had successful completion rates in the mid-40 percent range. The persistence rate for MAT 121 is approximately 70% while that of MAT 221 is 52%. Perhaps one reason for the difference is that MAT 121 is a prerequisite for a wide range of courses and subjects, so that students feel they must pass regardless.

MAT 221 is primarily taught by a single instructor, whose policy is to withdraw students who are not consistently attending; MAT 121 is taught by several different instructors with varying policies. This may account for the difference in the persistence rates.

5. *Describe* what the area already did to improve completion and persistence trends (#3 & 4 above) since the last program review. *Indicate* how frequently each effort was conducted during the past five years.

The departmental final exam for MAT 121 was completely rewritten in FY12. Instructors tried a variety of different activities to help students succeed in MAT 121. These include: making midterm exams comprehensive in nature and administering daily quizzes (at least one instructor for the past four years), holding a focus group (once), and scheduling final exam review sessions (at least three times by several instructors).

Final exam review sessions have been held on multiple occasions by various instructors, but in FY 09 we documented the review sessions and tracked the results. Three final exam review sessions were held in April of 2009. Two were held in the day, one at night. Eleven students attended at least one of the three, two attended two of them, and one attended all three sessions. Of the eleven, one withdrew before taking the final. The final exam mean and standard deviation for the remaining ten were 56.2 and 21.4, respectively, compared with 43.2 and 18.1 overall. It is not known whether the final exam review sessions were the cause of the improvement for these students. (For example, it could be that the students who attended the review sessions were not typical, but were those most likely to do well in any case.)

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6. *Describe* what the area will do to improve completion and persistence trends (#3 & 4 above) during the next five years.

We will investigate completion and persistence rates for Math for Elementary Teachers, College

Algebra, and Business Calculus.

We want to consider the following idea: teach a course which takes two semesters (at least 3 credit hours each) and covers the equivalent of MAT 121. The idea would be that students take twice as long to complete the MAT 121 material, but that the extra time allows them to really learn it effectively. Somehow we would want to set things so that the two courses would articulate, when combined, to a MAT 121-equivalent course. Perhaps the way to do that is to have only the second course articulate. At least one instructor plans to pilot the use of WebAssign (similar to MyMathLab) in MAT 121. We will also revisit the cut scores for entry-level college math courses.

→Retention & persistence plans were added to the area's Operational Plan?
X YES!

Declared Majors: Trends

Insert Data Table 2 here

DATA TABLE 2: Completion Data						Discipline Group:	Mathematics	
Row		FY08	FY09	FY10	FY11	FY12	5 Year Total	
Totals for all Programs in Discipline								
a	Declared majors	4	4	6	11	8	33	
b	Number of program completions	1	1	2	2	1	7	
c	Average number of Fall & Spring terms to completion	1	2	1	3	4	2	
Program:	**Mathematics (AS 0416)**							
d	Declared majors	4	4	6	11	8	33	
e	Number of program completions	1	1	2	2	1	7	
f	Average number of Fall & Spring terms to completion	1	2	1	3	4	2	
g								
h								
i								

Program completion total and Math totals are the same as you are only looking at one degree.

7. Using data table 2, *describe* the five-year trends pertaining to the number of declared majors. If possible, explain the trend.

The number of declared majors doubled over the five year period, but was higher in FY 11. The numbers are so small that it's difficult to extrapolate additional insight. (Most MAT courses are taken by students who major in other fields, and even the students in our most advanced math courses tend to major in math-related fields such as engineering rather than in math itself.)

8. Using data table 2, *describe* the five-year program declared major completion trends. If possible, explain the trend.

Some years we have one student, others we have two students.

In an effort to understand these results, we obtained more detailed information about declared math majors attending Sauk in the last five years. Based that information we found the following:

During the last 5 years a total of 30 students initially declared a major in Mathematics (24 students) or Mathematics AAT (6 students). Of the 6 students indicating participation in the Mathematics AAT program, 0 students continued to pursue that major. However, 1 of these students switched his/her major to Mathematics.

A total of 16 students (of the original 30) remained Mathematics majors at their most recent declaration (or eventually returned to Mathematics by the time they filed their intent to graduate). Of these 16 students, there were 7 students who graduated from SVCC with a major in Mathematics, 2 students who ultimately graduated from SVCC with another major, and 7 students who did not finish their degree (and are not currently enrolled at SVCC). Of the 7 who did not finish their degree, 1 student earned straight As in seven SVCC math courses and successfully transferred to Illinois State University, 1 student was successful in MAT 203 (last math course attempted), 1 student was successful in MAT 203 but withdrew from MAT 204 (last math course attempted), 1 student was successful after 4 attempts at her only math course (MAT 074), and
3 students were not successful in any math course they attempted.

Of the 14 students who switched their major (and didn't graduate with an AA in Mathematics), there were 5 students who graduated from SVCC with a degree in another field, 4 students who are currently enrolled (for Fall 2012) and 5 students who are not currently enrolled.

If one focuses on the 12 math majors who demonstrated an ability to successfully complete higher-level math courses, it appears that 10 of them were either successful in completing an associate's degree in math or another field, or were successful at their transfer institution.
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9. Use data table 2 to *verify* that students are not taking more than 6 fall/spring semesters to compete a degree or 4 fall/spring semesters to complete a certificate. *Explain* any discrepancies.

They are not. The average has never been higher than 4.

10. *Describe* what was already done by the area to increase the number of program completions since the last program review. Indicate how frequently each effort was conducted during the past five years.

.We have consistently offered MAT 211, 230, and 231 tutorially to better accommodate students who needed the courses to complete their degrees/

11. *Describe* what will be done to increase the number of program completions during the next five years.

We want to market the math major to Sauk students more successfully, using some of the ideas described below in question 13.

→Was the plan to increase program completions added to the area's Operational Plan? X YES!

Marketing
Systematic efforts aimed at attracting students to the program and increasing the numbers of declared majors.

12. Not including the catalog and program brochure, *describe* how the program has already been promoted and marketed *to increase program enrollment and the number of declared majors* during the past five years, and the frequency of each promotional or marketing activity. Examples included departmental website, high school visits by faculty/staff, community presentations, etc.

The SVCC Math web site was revamped last year. We continue to host mathematics competitions annually for area middle and high school students which helps familiarize them with SVCC and our math program. Approximately 50 middle school students attend the MathCounts competition and approximately 35 high school students attend the American Mathematics Competitions each year. Top scoring students receive SVCC mementos and are photographed and identified in a press release. We also offer a Math Club as a student activity on our campus. Student interest in the Math Club varies from year to year. Top SVCC math students with high GPAs are invited to join Mu Alpha Theta, a national mathematics honor society for high schools and two year colleges. Approximately 6-10 students are recognized each year for their Mu Alpha Theta designation at the annual leadership banquet.

13. Describe how the program's faculty/staff can promote and market the program AND additional ways the college can market the program in the future to *increase program enrollment and the number of declared majors.*

Continue to offer the activities mentioned in #12 above. In the future, SVCC viewbooks can be distributed to high school students participating in the American Mathematics Competition and current SVCC students encouraged to assist and speak about their experiences . The SVCC math web site can be enhanced to include an introduction with pictures of faculty and math students along with faculty bios. Complete course descriptions can also be added. Students can be educated on careers available with a degree in mathematics (for example, in classes or by distributing flyers or displaying posters).

Regarding the SVCC Math Club and Mu Alpha Theta, a flyer can be generated for faculty to distribute to students at the beginning of the semester. Depending on student response, appropriate club activities will be planned. .

→Was the PR/marketing coordinator contacted for suggestions? X YES!
→Were the marketing suggestions added to the operational plan? X YES!

Transferability ***Transfer Classes Only (if there are no transfer classes, skip to Question 17.***
Do the program's courses effectively transfer to 4-year institutions?

14. ICCB expects the college to maintain current articulation agreements for all 1.1 transfer courses. Use the following link to create a master table that shows the current articulation agreements for the program's courses. http://www.svcc.edu/students/equivale.pdf

SVCC Courses	Universities it articulates with
MAT 110	EIU, ISU, NIU, SIUC, UIUC, WIU

MAT 111	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 115	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 121	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 122	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 150	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 203	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 204	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 205	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 211	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 220	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 221	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 230	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 231	EIU, ISU, NIU, SIUC, UIUC, WIU
MAT 240	EIU, ISU, NIU, SIUC, UIUC, WIU

*To add more rows, right click on table and add rows.

15. If any course(s) does not transfer to at least four universities, indicate which course and what universities it does not transfer to or indicate "none."

MAT 106 does not transfer, because it is intended for CTE students.

→If there was a problem with transferability, was the transfer coordinator contacted to resolve the problem? ☐ YES! If NO, why?

16. Describe any other *recurring* problems related to IAI approved courses transferring to universities and what <u>needs</u> to be done to obtain resolution, ***OR*** if there were not any *recurring* problems, indicate "None."

None

→If there was a recurring problem, was the solution added to the Operational Plan? ☐ YES! If NO, why?

Career & Technical Programs (CTE)
Career Technical Programs… if not CT, then skip to Question 22.

Insert Data Table 3 here (CTE follow up study results)

Not applicable…please skip.

17. List any concerns identified in the *Career and Technical Follow-Up Study* and discuss solutions, ***OR*** if there were no concerns identified, indicate "No concerns."

18. <u>Occupational Wages</u>- LOCAL data: Use data from the *IDES (Illinois Department of Employment Security)* to answer the following question. Use this link to go to the IDES webpage for occupational wages: http://www.ides.illinois.gov/page.aspx?item=913

Once there, locate the section Economic Development Region Occupational Wages (PDF & Excel). Use Economic Development Region 6. Indicate Excel spreadsheet. Once the spreadsheet is loaded, click cursor over occupations. Find DATA in menu bar and sort A to Z. Find examples of occupational entry wages for your program. List them below. Supply relevant examples.

Occupation	**Entry Wage**
	$
	$
	$
	$

19. Occupational Outlook—LOCAL data: Use the data from the *IDES* to answer the following question. Use this link to go to the IDES webpage for employment outlook: http://www.ides.illinois.gov/page.aspx?item=911

    Once there, locate the Local Workforce Area, Long Term section. Select region 6. Choose Excel. Once the spreadsheet is loaded, click cursor over occupations. Find DATA in menu bar and sort A to Z. Find examples of employment outlook for the same occupations chosen above. List them in the table below. Supply relevant examples.

Occupation	**# of jobs: 10 year long range forecast (use +/- to indicate growth or decline)**	**% projected change: 10 year long range forecast (use + or -)**

20. Occupational Wages & Outlook- NATIONAL data: Use data from the U.S. Bureau of Labor Statistics to answer the following questions. Use this link: http://www.bls.gov/ooh/home.htm Select occupational group and determine Entry level education. Then select occupation and answer median wage and job outlook question. List them below. Supply relevant examples.

Occupation	**Entry Level Education**	**Median Wage ($ per hour)**	**"Job Outlook" or % projected growth (use +/-)**
		$	
		$	
		$	
		$	

21. Summarize the information from the three tables above (local wages and long range jobs forecast & National wages and long range job forecast) and predict the future need for the programs under review.

Part 2: PROGRAM FINANCES & COST EFFECTIVENESS

Insert Data Table 4 here

DATA TABLE 4: Income and Expense Revenue — **Discipline Group: Mathematics**

Tutorials not included. Honors students included. Honors sections not included.

Row		FY08	FY09	FY10	FY11	FY12	5 Year Total
a	Direct income (Tuition & fees at 10th day)	$258,063	$256,708	$303,270	$329,634	$310,247	$1,457,922
b	Apportionment (Estimated)	$55,978	$35,661	$41,583	$40,309	$37,722	$211,253
c	**Total income** (Row a + b)	$314,041	$292,369	$344,853	$369,943	$347,969	$1,669,175
d	Employee expense (Salaries & benefits)[1]	$276,216	$264,344	$272,564	$259,501	$252,012	$1,324,637
e	Employees						
	Full time Faculty	5	5	4	4	4	
	Full time Faculty - non discipline	2	2	3	3	3	
	Adjunct Faculty	11	9	9	8	11	
	Off-campus (Dual Credit Faculty, Clinical supervisors, etc.)	3	3	2	3	0	
f	Supply expense (Purchases charged to budget supply line & software purchases)	$5,974	$8,233	$14,388	$6,808	$7,187	$42,590
g	Equipment expense (Purchases charged to budget equipment line)	$0	$0	$0	$0	$0	$0
h	Other expense (Any expense that does not fit into the above categories)	$19,111	$22,618	$23,204	$23,034	$24,139	$112,106
i	**Total expense** (Row d + f + g + h)	$301,322	$295,214	$310,174	$289,361	$283,356	$1,479,427
i	**Net income** (Row c - Row h)	$12,719	-$2,845	$34,679	$80,582	$64,613	$189,748

[1] Employee expense = Salaries (prorated by credits taught) + benefits (averaged across the College to eliminate penalties to programs due to dependent insurance coverage)

22. Using data table above, *describe* the five-year income and expense trends for each area.
Income has increased overall from 314,041 in FY 08 to 347,969 in FY 12. It was lowest in FY 09 and highest in FY 11. Net income followed the same trend. Expenses had a downward trend over the last five years, except that they were slightly higher in FY 10. We are curious as to why no instructors were paid for dual credit in FY 12.

23. *Describe* what your area did during the previous five years to improve the program's financial viability.

Offering required courses on a tutorial basis when it was not cost effective to offer a standard section
Note that most of our courses are well-attended..

24. Describe what your area will do over the next five years to improve the financial viability of the program.

In addition to continuing with our current practices, we will look for ways to more effectively market the program, as described above in the answers to questions 12 and 13..

→Was the financial viability plan added to the area's Operational Plan?

☐ YES!

PART 3: PROGRAM QUALITY

The quality component focuses on qualitative analysis and issues

Course Scheduling

25. Use the Master Schedule to help you complete this table. Provide the program schedule by listing each course by course number and use an "X" to indicate each semester it is planned to be offered and whether the class was held at night or during the day and/or online. (e.g., IF a course is scheduled at night AND day in the Fall semester, then use an X to mark each box.)

COURSE NUMBER	DAY (BEFORE 4 PM) NIGHT (4 PM OR LATER) ONLINE	PREVIOUS FY: FALL SEMESTER	PREVIOUS FY: SPRING SEMESTER	CURRENT FY: FALL SEMESTER	CURRENT FY: SPRING SEMESTER
MAT 106	Day	x	x	x	x
	Night	x	x	x	x
	Online	x	x	x	x
MAT 110	Day	x		x	
	Night				
	Online				
MAT 111	Day		x		x
	Night				
	Online				
MAT 115	Day	x	x	x	x
	Night		x		x

	Online				
MAT 121	Day	x	x	x	x
	Night	x	x		x
	Online				
MAT 122	Day		x		x
	Night	x		x	
	Online				
MAT 150	Day		x		x
	Night				
	Online				
MAT 203	Day		**x**	**x**	**x**
	Night	**x**		**x**	
	Online				
MAT 204	Day		**x**		**x**
	Night				
	Online				
MAT 205	Day		**x**		**x**
	Night				
	Online				
MAT 211	Day	**x**		**x**	
	Night				
	Online				
MAT 220	Day	**x**	**x**	**x**	**x**
	Night				
	Online				
MAT 221	Day	**x**	**x**	**x**	**x**
	Night				
	Online				
MAT 230	Day		**x**		**x**

	Night				
	Online				
MAT 231	Day				
	Night				
	Online				
MAT 240	Day	**x**	**x**	**x**	**x**
	Night				
	Online	**x**		**x**	

*If more space is needed, you can add more rows to this table by "right clicking" on the last row and "inserting rows."

26. Use the table above to answer this question. For each degree and certificate under review, have courses been offered that are properly sequenced so a student could complete every degree and/or certificate in the number of semesters specified?

X	Yes
☐	No

If no, please specify what degrees or certificates are problematic and the solution to the scheduling problem.
MAT 231 was offered only on a tutorial basis. Scheduling based on individual students/instructors.

→If changes are necessary to solve the scheduling problem, was it added to the area's Operational Plan? ☐ YES!

27. Use the table above to answer this question. Has each class been offered at **night** at least once during every academic year (fall or spring semesters)?

☐	Yes
X	No

If no, please specify what class has not been offered at night and justify if the class should or should not be offered at night.
MAT 110, 111, 150, 204, 205, 211, 220, 221, 230, 231, 240 have not been offered at night. After discussion with the counseling office and taking into account low night enrollments we concluded that additional night sections are not necessary at this time. MAT 110, 111, 150, 204, 205, 211, 230, and 231 are offered at most once a year, and total enrollment has been too low to support multiple sections a year.

One concern we have is that transfer business students can take all the prerequisite courses at night, but then find themselves unable to complete their gen-ed major course at night. We want to consider the possible benefits of offering evening sections of MAT 221 and 240. We plan to survey students to assess whether this is a need.

→If changes are necessary, was it added to the area's Operational Plan?
X YES!

28. Use the table above to answer this question. Has each class been offered **online** at least once during every academic year?

☐ Yes
X No

If no, please specify what class has not been offered online and justify if the class should or should not be offered online.
MAT 110, 111, 115, 121, 122, 150, 203, 204, 205, 211, 220, 221, 230, 231 have not been offered online. MAT 110, 111, 150, 204, 205, 211, 230, and 231 are offered at most once a year, and total enrollment has been too low to support multiple sections a year. In discussion with the counseling office we learned that students occasionally inquire about online sections of 100-level math courses (e. g. MAT 115, 121).

We are planning to survey students regarding their interest in possible online sections of MAT 115, 121, 122, 203, 220, and 221. At the same time, we do not believe that every math course will do well as an online course. If a course is offered online, it should not be based merely on whether students would be interested in taking the course online. Before making a permanent decision to offer a course online, we would like to research and collect data about the success rates of online sections compared to in-class sections. This is particularly important for courses whose retention and completion rates are already low.

29. During the past five years, have scheduling conflicts been avoided by coordinating schedules with other required courses within your own area?

X Yes
☐ No

If no, what scheduling change can occur to reduce/avoid conflicts?

→If scheduling changes are necessary, was it added to the area's Operational Plan? ☐ YES!

30. During the past five years, have scheduling conflicts been avoided by coordinating schedules with other required courses outside of this area?

X Yes
☐ No

If no, what scheduling changes can occur to reduce/avoid conflicts?

→If scheduling changes are necessary, was it added to the area's Operational Plan?
☐ YES!

CURRICULUM: COURSE OUTLINES

31. ICCB requires that we maintain current articulation agreements. Therefore to help with this process, all course outlines for this area must be updated to the current Fiscal Year and a curriculum committee action form submitted for each course. Complete the appropriate Curriculum Committee Action Forms for each course and send electronically with this program review form. Action forms are found on FAST.

Course Number	Has the outline been updated to reflect current academic practices & current FY? Yes or No.	Has the Curriculum Committee Action Form been completed and sent electronically along with this program review? Yes or No.	Has an accompanying master syllabus been completed for each class and attached electronically along with this program review?
MAT 106	Yes	Yes	Yes
MAT 110	Yes	Yes	Yes
MAT 111	Yes	Yes	Yes
MAT 115	Yes	Yes	Yes
MAT 121	Yes	Yes	Yes
MAT 122	Yes	Yes	Yes
MAT 150	Yes	Yes	Yes
MAT 203	Yes	Yes	Yes
MAT 204	Yes	Yes	Yes
MAT 205	Yes	Yes	Yes
MAT 211	Yes	Yes	Yes
MAT 220	Yes	Yes	Yes
MAT 221	Yes	Yes	Yes
MAT 230	Yes	Yes	Yes
MAT 231	Yes	Yes	Yes
MAT 240	Yes	Yes	Yes

*If more space is needed, you can add more rows to this table by "right clicking" and "inserting rows."

CURRICULUM: ASSESSMENT
Additional resources: Assessment Summary Reports and Operational Plans

32. *List* all of your program/area objectives that have NOT been assessed in the previous five years and indicate whether these will be assessed in the future, eliminated, or replaced, ***OR*** indicate "All have been assessed." If they were never assessed, explain why?

All have been assessed.

33. *Describe* any major curricular changes ensuing from assessment, which were made during the past five years, and the positive and/or negative results due to those changes, ***OR*** indicate "None."

None

→Were summaries of assessment activities placed within the Operational Plan?
X YES!

34. For the <u>five years</u> previous to this program review, have all <u>full-time faculty</u> contributed data to at least one Gen-Ed competency? At least one area objective? Use a "yes" to indicate 100% compliance and a "no" to indicate less than 100% compliance.

Academic Year (e.g., 2011-2012)	**Gen-Ed Competencies 100% full-time compliance (Yes or No)**	**Area Objectives 100% full-time compliance (Yes or No)**
2007-2008	No	No
2008-2009	No	No
2009-2010	No	No
2010-2011	No	No
2011-2012	No	No

→Has a permanent assessment goal of 100% compliance by full-time faculty been added to the Operational Plan? X YES!

35. For the five years previous to this program review, have <u>adjunct faculty</u> contributed data to at least one Gen-Ed competency? At least one area objective? Supply the % of adjuncts that are contributing to academic assessment data.

Academic Year (e.g., 2011-2012)	**Gen-Ed Competencies** (Indicate % of adjuncts)	**Area Objectives** (Indicate % of adjuncts)
2007-2008	0	0
2008-2009	0	0
2009-2010	0	0
2010-2011	0	0
2011-2012	0	0

→Has a communication method been established and the method added to the Operational Plan to increase adjunct participation in the academic assessment process?
X YES!

CURRICULUM: CURRICULAR CHANGES

Additional resources: Assessment Summary Reports
Operational Plans

36. *Describe* any major curricular changes (outside of assessment) made during the past five years, and the positive and/or negative results of those changes, ***OR*** indicate "None."

By January 2012, the prerequisite on MAT 240 had been updated to reflect current practice at other institutions. When the change was made, successful completion rates dropped to as low as 47.2%. The lower prerequisite level is appropriate in terms of the actual mathematical content required, but students appear to be struggling because they are less mathematically mature.

37. *Describe* possible changes in transfer requirements or content that may be ***imposed*** on the program during the next five years, ***OR*** indicate "None."

None

→If changes are necessary, was it added to the area's Operational Plan?
☐ YES!

38. *Describe* anticipated curricular changes that the department will propose during the next five years and the accompanying needs that will be required, or indicate "None."

CURRICULAR CHANGES	EQUIPMENT AND/OR SUPPLY NEEDS	FACILITY NEEDS	PERSONNEL AND/OR TRAINING NEEDS	ESTIMATED EXPENSE
None				

→If changes are necessary, was it added to the area's Operational Plan?
☐ YES!

Professional Development & Staffing

USE DATA TABLE 4 TO ANSWER THESE QUESTIONS

39. Using the data table 4, *describe* the current staffing trends in each area. Are they adequate and appropriate?

The number of staff overall continues to be adequate and appropriate. Upcoming changes in the developmental math area may have an impact on our area as well. Decisions about staffing in either area should take the other area into account.

40. If staffing changes are needed for this area within the next five years, please describe them along with a rationale or indicate "no staffing changes needed." Indicate any planned retirements and any staffing needs to fill the retiree. Complete the *personnel request form* found within FAST.

→If staffing changes are necessary, was it added to the area's Operational Plan?
☐ YES!

41. *Describe* the types and quality of communication between full-time faculty and adjunct faculty (including dual credit faculty) in each area.
We have sought and received participation from adjunct faculty when the need warrants, such as when decisions are being made that affect the curriculum or instructional practices. Adjuncts are welcome to participate at any time. Steve Shaff attends the adjunct faculty in-service semi-annually and is available at that time to answer questions and engage in discussion.

42. How can the communication between full-time faculty and adjuncts (including dual credit faculty) be improved?
One idea that has worked well in the past was to hold mixers; i.e., opportunities for full-time and adjunct faculty to get to know one another in an informal setting. We want to consider reviving this practice. We also plan to reach out to adjuncts through regular e-mails.

It would be good to provide and utilize opportunities for Sauk faculty to coordinate with area high school instructors, including dual-credit instructors.

→If changes are necessary, was it added to the area's Operational Plan?
X YES!

43. Has 100% of full-time faculty participated in some form of *professional development* during the past 5 years?

☐	Yes
X	No

44. For <u>each</u> full-time employee, describe the anticipated professional development that he/she will participate in within the next 5 years?

Employee Name	**Description of Anticipated Professional Development Activity**	**Fiscal Year of Activity**
Steve Shaff	Attend Common Core, ICTM, NCTM, IMACC, MMC or other conferences	FY17
Kevin Megill	Attend Common Core, ICTM, NCTM, IMACC, MMC or other conferences	FY17
Ernie Etter	Attend Common Core, ICTM, NCTM, IMACC, MMC or other conferences	FY17
Carrie Conderman	Attend Common Core, ICTM, NCTM, IMACC, MMC or other conferences	FY17

→Were the professional development activities added to the area's Operational Plan? X YES!

45. Will any area employees (including part-time) need any *specialized* & *required* professional development within the next 5 years? If yes, then summarize the specialized professional development, the year of anticipated need, and what employee will need to participate in the professional development.

☐	Yes
X	No

→If specialized professional development is necessary, was it added to the area's Operational Plan? ☐ YES!

Equipment and Supplies

46. *Identify* current deficiencies in equipment, software, and/or supplies that negatively impact the program (be as specific as possible), ***OR*** indicate "None."

None. Many instructors find that they do not have enough working markers in the classrooms. There are others who have a strong preference for chalkboards, as opposed to whiteboards.

→If equipment is needed immediately, was it added to the area's Operational Plan? ☐ YES!

47. Identify *new and/or replacement* equipment, software, and/or supplies needed by the program within the next five years. Also supply cost estimates, the anticipated fiscal year needed, and a rationale for the purchase ***OR*** indicate "None." Do not include items associated with the curriculum changes noted in prior section.

None

→If equipment is needed within the next five years, was it added to the area's Operational Plan? ☐ YES!

Student Support Services

Definition: College services that are ***specific to this program***, which are utilized by students outside of the classroom (i.e. tutoring in the LAC, special materials in the LRC, computer lab resources, etc.)

48. *Describe* the current support student services that are ***specific to this program*** that are available to students, ***OR*** indicate "None."

Math tutors from the LAC, SSS, Student Needs; calculators available to check out in the LRC; creation of study groups, especially in classes with low completion rates; instructional videos available in the LAC and the LRC; math handouts available in the LAC.

49. *Describe* any current gaps in the student support services that are ***specific to this program*** and identify possible solutions, ***OR*** indicate "None."

Some courses (e.g., 106) have no instructional videos available, but could have. The solution would be to obtain instructional materials for these courses if they exist.

It would helpful to have a list of available tutors for students who request one.

We recommend increasing the number of available graphing calculators (TI-83+ s orTI-84s) in the LRC.

→Were changes/additions in support services specific to your area included in the area's Operational Plan? X YES!

50. *Describe* any changes in the need for student support services anticipated to occur during the next five years and the anticipated year it will be needed, ***OR*** indicate "None."

None.

→Were changes/additions in support services specific to your area included in the area's Operational Plan? ☐ YES!

STUDENT INPUT
Definition: Efforts aimed at obtaining student opinions and suggestions for improving the program.

51. Describe the efforts to obtain student input, the frequency of each effort, what was learned, and changes that were made during the previous five years ***OR*** indicate "Not applicable."

Source of Input	Efforts to obtain student input, the frequency of each effort, what was learned, and changes that were made
Assessment Activities	NA
Interviews	NA
Surveys	NA
Other	NA

52. Describe the efforts to obtain student input that **will be attempted** during the next five years and the years they will be attempted.

Consider creating student focus groups to learn about the barriers students experience in these classes, as well as what has helped students to be successful in these classes. Additionally, we have plans to survey students about student needs (such as the delivery of courses).

→Were the methods to attain student input added to the Operational Plan?
X YES!

NON-STUDENT INPUT
Definition: Formal efforts aimed at obtaining information regarding program content and improvement from informed sources other than students, for the purpose of keeping the program current and relevant (e.g. IAI, staying informed of changing transfer requirements, meeting with other departments, meeting with colleagues from other colleges).

53. *Describe* the efforts that were used within the last five years to obtain input, the frequency of each effort, what was learned, and changes that were made during the previous five years ***OR*** indicate "Not applicable. Your past operational plans may be of help here.

Method	**Efforts to obtain input, the frequency of each effort, what was learned, and any program/area changes that were made**
Conference attendance	Not applicable
IAI updates	Not applicable
Networking with colleagues	Not applicable
Professional association membership	Not applicable
Other	Not applicable

54. *Describe* the formal efforts to obtain non-student input that will be attempted during the next five years and planned year of implementation.
The college focuses on the Gen Ed objectives of quantitative reasoning or problem solving every three years. At the next cycle, we will consider whether we have questions or issues we wish to bring before the faculty, and if so we will request an opportunity to do so.
→Were the efforts added to the Operational Plan? X YES!

Additional Information

55. Use the space below to indicate any plans not carried out from the last program review and explain why they were not carried out OR put "none".
None

56. Describe any possible changes (not already addressed) that may be imposed on your area or the College that will negatively or positively affect the efficiency of your area and the year of expected implementation. Examples may include changes in state or federal regulations, ICCB requirements, or a dramatic demographic change OR indicate "none."

Describe the "imposed change"	**Fiscal Year change will take affect**
None	

57. Referring to the question above, what strategies will the area implement to address any concerns? If no concerns, indicate "none."

Describe the proposed strategies to deal with the issues above	**Fiscal Year of implementation**
None	

→If applicable, were the strategies added to the Operational Plan? ☐ YES!

58. Use the space below to tell the PR committee about any program issue(s) not addressed within this program review or indicate "none". Indicate any possible solution to the program issue.

None

→Were the solution(s) added to the Operational Plan? ☐ YES!

ACADEMIC DISCIPLINE PROGRAM REVIEW SUMMARY REPORT

Required **ICCB Program Review Report**

Sauk Valley Community College **Academic Year 2012 - 2013**

Discipline Area	Mathematics

Need, cost-effectiveness & quality. *Please create a short summary paragraph for each question below.*

Need: Is it expected that there will be a continuing need for courses in the academic discipline? Is the array of courses offered in the program appropriate to meet the needs of students and support academic programs? Although the declared number of math majors is small, our math courses are necessary for students in many other fields, as well as providing an important component of general education. Enrollment remains strong. All of the core courses articulate via IAI, and we offer nearly all available IAI-transferable math courses. All career programs at Sauk also require completion of a college-level math course for graduation. For these reasons, we are confident that there will be a continuing need for our math program.

We have sufficient sections of our courses to allow students to graduate in a timely manner. We will be considering the possibility of more night courses or online courses in the future.

Cost-effectiveness: What steps can be taken to offer courses more cost effectively? Are there needs for additional resources? In addition to continuing the practices that have made us cost-effective to date, we will monitor the need for alternate course formats such as online courses, dual enrollment, or scheduling low-enrollment courses every other year. Such alternate formats may allow us to reach populations that are currently underserved, and thus increase revenue for the college.

Quality: Based on the results of assessment and other information about courses and sequences of courses in the discipline, what steps need to be taken to update or improve instruction? Describe any programmatic achievements already achieved or are planned for the future. Our overall completion and persistence rates are high (62.5% completion rate, 79% persistence rate).

Our focus for improvement has been on increasing the success rate of students in "gatekeeper courses" such as MAT 121. We have focused as a department on gathering data about these courses; we have offered review sessions for the final exam, rewritten the departmental final, and rearranged the content to reflect the most important priorities for the course. In the future we plan to continue gathering data on these courses, and to pursue alternative approaches for them (such as teaching them in two semesters).

PROGRAM: ***Mathematics***

FY 2013: Instructional Five Year Program Review

CTE PROGRAM REVIEW SUMMARY REPORT

Required **ICCB Program Review Report**

Sauk Valley Community College **Academic Year 2012 - 2013**

Program Identification Information (only one CIP per template)

6-digit CIP	

Career Cluster	**Career Pathway**

Program of Study	**SVCC's Program Title**

Degree or Certificate Type	**Check only one**
03 – AAS	
20 – Occupational Certificate of 30-50 credits	
30 – Occupational Certificate of 29 or less credits	

SVCC Action

Possible Actions	**Check only one**
Continued with minor improvements	
Significantly modified	
Discontinued/Eliminated	
Placed on inactive status	
Scheduled for further review	
Other, please specify:	

Need, cost-effectiveness & quality. *Create a short summary paragraph for each question below.*

Need: Is it expected that there will be a continuing need for courses in the academic discipline? Is the array of courses offered in the program appropriate to meet the needs of students and support academic programs?

Cost-effectiveness: What steps can be taken to offer courses more cost effectively? Are there needs for additional resources?

Quality: Based on the results of assessment and other information about courses and sequences of courses in the discipline, what steps need to be taken to update or improve instruction? Describe any programmatic achievements already achieved or are planned for the future.

PROGRAM: ***Mathematics***

FY 2013: Instructional Five Year Program Review

BEST PRACTICES REPORT

Optional **ICCB Program Review Report**

Sauk Valley Community College **Academic Year 2012 – 2013**

The ICCB Best Practices report is optional and may describe the entire unit or a specific practice. IF this piece is completed, discuss your best practice and supply quantitative and qualitative data as evidence of its effectiveness.

Title of Best Practice

Programmatic Area (use an X to mark appropriate area)

	Academic Discipline
	Career and Technical Education
	Cross-Disciplinary
	Student & Academic Support Services

Description of the innovation/best practice (150 word limit)

What is the quantitative and/or qualitative evidence to support the best practice?

Contact Information

Sauk Valley Community College Name & Title: Phone Number: E-mail Address:

SIGNATURES and APPROVALS

NAMES AND SIGNATURES OF THE PROGRAM REVIEW TEAM Add lines if needed Signatures indicate that team members concur with the findings of the program review	
NAMES (Indicate chair/co-chairs)	**SIGNATURES**
Steve Shaff (Co-Chair)	
Kevin Megill (Co-Chair)	
Ernie Etter	
Carrie Conderman	
Sarah McFarlane	
Janet Matheney	
Scott VanZuiden	

PROGRAM REVIEW COMMITTEE	
This Program Review is complete and acceptable.	
This Program Review is complete but the conclusions ***are not*** fully substantiated.	
This Program Review is incomplete and unacceptable.	
Comments are attached (optional)	
Program Review Committee Chair; Date	
Program Review Committee Co-Chair; Date	

ADMINISTRATIVE APPROVALS Administrative signatures indicate an acceptance of the program review	
Academic Vice President	
President	