

Santa Rosa Junior College

Program Resource Planning Process

Mathematics 2017

1.1a Mission

The mission of the Department of Mathematics is to increase the knowledge, improve the skills, and enhance the lives of those served by its program. The department accepts its responsibility at all campus locations and in the following obligations:

- Providing a superior program for mathematics majors and students in mathematics-related fields such as engineering and physical sciences.
- Providing a superior program for students in liberal arts fields, which require mathematics as a part of their programs.
- Providing a superior general education program for students pursuing four-year degrees, two-year degrees, and certificates.
- Providing a superior basic skills program for students requiring pre-collegiate mathematical preparation.
- Promoting fair access and opportunities for success to students by eliminating physical and cultural barriers, and by actively recruiting students from all sectors of our community.
- Recruiting, securing and retaining faculty who love teaching, vigorously maintain interest in the field of mathematics and mathematics education, provide leadership in the local, state, and national mathematical communities, actively participate in college governance, and demonstrate sensitivity to the diverse needs and backgrounds of our students.
- Maintaining a high level of instructional quality and integrity, strong academic standards, and respect for learning.
- Fostering an atmosphere for student success by providing students with information to make sound academic decisions, by actively cooperating with the tutorial center, MESA, and Mathematics Computer Lab to help students outside the classroom, and by communicating with the Counseling Department to improve guidance services for all students.
- Providing students with a learning experience in which technology plays an integral part.
- Challenging students to achieve to the maximum of their abilities, and making certain that each understands the responsibility for her/his own academic success.
- Contributing to the cultural life of our community by presenting enrichment opportunities to our students and to community members.
- Providing comprehensive instructional support services such as well-maintained physical facilities, basic supplies, up-to-date technological equipment, adequate support staff (secretaries, computer specialists, student homework graders, lab instructors, and student lab assistants).
- Managing the resources of the department, anticipating future needs, and advocating necessary resources to meet those needs.

1.1b Mission Alignment

The mathematics department's mission is consistent with the district's mission and college initiatives in the areas of

- Focusing on student learning by preparing students for transfer
- Improving students' foundational skills
- Regularly assessing, self-reflecting, adapting, and continuously improving.

1.1c Description

The Mathematics Department serves mathematics majors and students in mathematics-related fields such as engineering and the physical sciences, students in liberal arts fields which require mathematics as a part of their programs, and students needing to satisfy general education requirements in four-year degree, two-year degree, and certificate programs. The Mathematics Department includes a computer lab and tutorial program, both of which are operated by department staff members.

1.1d Hours of Office Operation and Service by Location

The Mathematics Department Office (Shuhaw 1717) is staffed by a full-time administrative assistant between the hours of 7:30 am and 4:00 pm, M-F. The office is open during these times, as well as evening hours during the first two days of each term. The Department Chair's office is located within the department office, and the Department Chair may occasionally extend the hours for which the office is open. There is an almost constant flow of students and faculty into the mathematics office M-Th. Sadly, due to financial cut-backs, the department lost a part-time Administrative Assistant. The department's full-time Administrative Assistant is working very hard to keep up with the needs of the students served by the Mathematics Department and the faculty who teach in the department.

1.2 Program/Unit Context and Environmental Scan

The Mathematics major has not experienced any changes in content or articulation. We have created a Mathematics for Transfer major which articulates with the CSUs. The major includes our optional Math 6 which is a common lower division course for math majors.

Due to the decreased number of students being accepted into the CSU and UC systems, the demand for all our classes, particularly the high level classes, has increased.

Due to a policy at SSU which gives enrollment priority to students taking Statistics for the first time, the students who are not able to register for it there are coming to take Statistics at SRJC. We already had a high demand for this course, but it has increased considerably and we now offer more sections of Statistics than any other single course.

Due to low demand for Math 8A and Math 8B, we have phased out that sequence. This is highly unfortunate for the students who need those courses for their majors. Hopefully, as the budget situation improves, we can revisit the idea of offering these courses.

To serve those students seeking an AA degree, and not planning on transferring to a four-year school, the Mathematics Department offers Math 101: Mathematics for the Associate Degree.

In response to the push for acceleration in non-transfer level courses, the mathematics department developed Math 154, an 8-unit combined Elementary and Intermediate Algebra course. This course will be offered for the first time in Fall 2016.

The demand for all math courses is extremely high for basic skills students, degree-seeking students, and transfer students. This demand continues to increase as high tech employers and politicians alike push for more students to major in Science, Technology, Engineering, and Math. Not only does our department have too few instructors and too little space, but we continue to fall farther behind in our ability to serve all who are seeking our courses.

2.1a Budget Needs

We would like to maintain the current level of staffing the same number of hours for our Mathematics and Computer Lab, but increase the number of student assistants and/or math lab faculty during those hours. We are seeing an increase number of students at peak hours between 8:00 am and 3:00 pm and would like to see the staffing reflect the usage. At the current level, we need to retain the \$4500 for the year and add approximately \$4000 to our 2361 account for salary adjustments and to avoid mid-year supplementation by the STEM dean.

The graphics budget is severely inadequate for the department's needs and has been overspent every year for at least the last eleven years. Although we have taken measures to cut back significantly on using graphics, we are still falling short since our already insufficient graphics budget was cut. When IT decided they would no longer support printers, and suggested all printing be done to the copy machine, our graphics expenditures skyrocketed. The maintenance of the copy machine has us wary of its reliability. We must be able to depend on a machine for all our printing and copying needs.

Since IT will no longer support printers, some of which are required to be in compliance with FERPA, (department chair and AA offices), the department must now pay for repairs to printers and printer supplies. While the additional expense has been passed along to the department, the supply budget has not been increased and is now insufficient for needed maintenance costs.

Our STEM dean made a one-year commitment to pay for an institutional membership to AMATYC in 2016-2017 and we would like this to be an ongoing membership. With an institutional membership, we have free access to Webinars offered through AMATYC for professional development, we receive one free registration for an AMATYC conference, and free advertising in its publications. We request the budget include \$508 for the AMATYC institutional membership dues. The budget for the 5000 category needs to include staff travel. There are no funds allocated for staff travel although Mathematics Department faculty regularly attend Mathematics conferences many times yearly to enhance their professional development and to represent SRJC within various mathematical organizations. We have several math faculty that give talks at various conferences, including AMATYC, statewide and some are not reimbursed for their travel expenses. We would like to support our colleagues by

attending their talks at these conferences. We would like to see travel and conference money restored that is separate from Student Equity funds.

2.1b Budget Requests

Rank	Location	SP	M	Amount	Brief Rationale
0001	Santa Rosa	01	01	\$5,000.00	We are asking for a permanent increase to the student worker fund to pay the extra student workers during peak times in the Math Lab.
0002	ALL	02	01	\$16,000.00	We overspend our graphics budget every year and continue to do so in spite of the efforts of the faculty to use electronic documents whenever possible. For 2016-17 we had \$11,200 and will overspend by approximately \$4,800.
0003	ALL	02	07	\$8,608.00	With an AMATYC institutional membership, we have free access to Webinars offered through AMATYC for professional development, we receive one free registration for an AMATYC conference, and free advertising in its publications. AMATYC Institutional Membership \$508. Travel: Our instructors are extremely dedicated to renewing their knowledge base and take on a great amount of expense in order to attend conferences. Many of our instructors are involved in organizing these conferences for faculty from other two-year colleges and yet our travel remains unfunded. Although \$300 per instructor would not cover all travel costs, it would alleviate some of the burden and demonstrate the college's commitment to professional development.

2.2a Current Classified Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Administrative Assistant II	40.00	12.00	The Administrative Assistant II provides detailed administrative support for the Mathematics Department Chair and math faculty, acts as liaison with other District departments, and provides information and assistance to students who come to the Mathematics Department office. Responsibilities include budget development, tracking and monitoring budgets and expenditures and providing budget assistance to faculty and staff, curriculum support, assisting in the schedule development process, monitoring faculty loads, assisting students and the Department Chair with Prerequisite Challenges and Petitions, and initiating schedule changes. The position requires the ability to perform administrative duties using initiative, confidentiality, independence and problem solving skills with a high level of expertise in office management on a daily basis. Furthermore, this position requires a thorough working knowledge of several complex software systems, including but not limited to Escape, SIS, and the new EMS. Student and faculty contact requires an extensive knowledge of District Policy & Procedure.

2.2b Current Management/Confidential Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Department Chair, Mathematics	31.20	12.00	Manage a very large and complex multi-campus program. The release time of 77% is not at all sufficient. The Chair duties alone - aside from the required teaching duties - make up a full-time job in this department. The job includes, but is not limited to being responsible for scheduling credit and non-credit FT and adjunct faculty, dealing with personnel, addressing student concerns, making decisions on student petitions, keeping SLO assessments on track, oversee the revision of curriculum and satisfying C-ID requirements, knowing policy and procedure and contract, having budget and staffing awareness, advocate for faculty while maintaining a relationship with

			administration, dealing with facility issues, health and safety of colleagues, represent the Math department and SRJC locally and globally, and teach.
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2.2c Current STNC/Student Worker Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Student Lab Assistants	80.00	12.00	Assist students and faculty in the Shuhaw Math Computer Lab. The lab currently is open almost 80 hours/week, and student lab assistant coverage is needed to supplement the assistance provided by the adjunct lab instructors. Technically these students are now hired by and supervised by an IT employee, but they are still paid through the Math budget.

2.2d Adequacy and Effectiveness of Staffing

The ratios from our department that have been provided in the core data for 2015-2016 are:

Data Element	Value	Change from 2014-15	District Total	% of District Total
FTE-S : FTE-F	24.2270	-2.37%	23.6877	102.28%
FTE-AF : FTE-CF	1.1705	6.86%	1.4495	80.75%
FTE-F : FTE-SS	14.8376	17.54%	1.0393	>1000%
FTE-F : FTE-M	75.5453	-0.85%	5.7632	>1000%
FTE-SS : FTE-M	5.0915	-15.64%	5.5451	91.82%
FTE-ST : FTE-C	0.0291	-95.96%	0.1996	14.57%
Average Faculty Salary per FTE-F	\$58,826.47	-2.26%	\$62,562.31	94.03%
Average Classified Salary per FTE-C	\$61,053.03	4.42%	\$48,824.87	125.04%
Average Management Salary per FTE-M	\$104,858.05	2.54%	\$75,781.16	138.37%
Salary/Benefit costs as a % of total budget	99.29%	0.25%	72.02%	137.86%
Non-Personnel \$ as a % of total budget	0.71%	-25.74%	11.43%	6.17%
Restricted Funds as a % of total budget	0.04%	-84.55%	16.55%	0.25%
Total Unit Cost per FTE-F	\$78,116.11	-0.89%	\$192,197.83	40.64%
Total Unit Cost per FTE-C	\$4,544,003.95	-1.74%	\$316,810.88	>1000%
Total Unit Cost per FTE-M	\$5,901,303.83	-1.74%	\$1,107,674.47	532.77%
Total Unit Cost per FTE-S	\$3,224.34	1.51%	\$8,113.83	39.74%
Total Unit Cost per student served/enrolled	\$597.19	83.83%	\$4,760.40	12.54%

Our staff is not adequate in the following areas:

Administrative Assistants:

In previous years, the Mathematics Department office was staffed by an AA III and a half-time AA I. The job duties and demands have increased, especially with ever-changing software requirements, but are now being done by one AA II. The workload and duties are more than that of an AA III, and our current AA II, who is successfully meeting these demanding job requirements, should be upgraded to an AA III and be given compensation appropriate for the work that she does. Other AA III working in other departments and programs are consistently asking our AA II for assistance with budget, requisitions, personnel, PAFs, etc. It would be extremely advantageous, with the pending 7 tenure-track evaluations for 2017-18, in addition to adjunct and FT evaluations to have an AA III that can take care of the evaluation process within the department.

Student employees - Student Lab Assistants:

The Student Lab Assistants assist with the daily maintenance of the Math Lab. In addition, they tutor students who need help with mathematics, chemistry, physics and engineering courses. The number of students employed varies depending on the number of hours that the student can individually work. In the beginning of the semester it is better to have double shifts of

students working in the morning and early afternoon hours since the demand for tutorial help is overwhelming during that part of the semester. The total student work hours per week is about 80 not including the double shifts. Some students are needed to help with the setup of the computers in the Math Lab between semesters.

Currently, we have to carefully balance the number of hours worked by FWS students to make sure that we can have the lab open for the entire semester. If we were to lose one of our FWS students, we would have to either overspend our budget or close the lab at the end of the semester when math students really need help.

We are hoping to obtain more permanent funding for both math lab rooms in the amount of \$3500-\$7500 per semester depending upon whether enough qualified student lab assistants could be hired, or if it would be necessary to hire classified staff for that purpose. The orientation of new student math lab workers is also a best practice and compensation is therefore needed for these sessions.

Student employees - Graders/Readers:

In previous years, the Mathematics Department has had a budget for homework graders/readers. This program was completely eliminated in 2009. The Mathematics Department still feels strongly that daily homework feedback, which is very difficult if not impossible for faculty to provide for all of our students, is vital to student success.

Math Lab Coordinator:

This position was removed from the Mathematics Department and is now staffed by IT. The coordinator has been able to meet the needs of the Math Lab this year, but there are concerns that if this IT employee is given too many IT duties outside of the Math Lab, that will no longer be the case. There are many computer demands within the department that could be handled easily and more efficiently by the Math Lab Coordinator if the job description limited the job to the Mathematics Department.

Math Lab Faculty:

Our math lab faculty had a first-ever meeting in fall 2016 with the department chair, the STEM dean and the Math Lab Coordinator. This meeting was deemed successful by everyone in attendance because it addressed concerns that had not been discussed, clarified duties and policy, and provided a means for math lab faculty to voice their concerns and questions. The meeting was funded by Student Equity since our math lab faculty directly affect the success of our students. We need to have these meetings at least once a year, or better yet, once a semester for workplace effectiveness and student success. We should include compensation for attending these meetings so it needs to be budgeted.

2.2e Classified, STNC, Management Staffing Requests

Rank	Location	SP	M	Current Title	Proposed Title	Type
0001	Santa Rosa	02	02	AA II	AA III (Approved to Work Out of Class)	Classified
0002	Santa Rosa	01	01	Student Lab Assistants (several)		Student
0003	Santa Rosa	01	01		Math Lab Faculty (several); Faculty Request	Classified
0004	ALL	01	01		Mathematics Graders (many)	Student

2.3a Current Contract Faculty Positions

Position	Description
Mathematics Instructor 25	The staffing has decreased from 28 since 2015 due to retirements that have not been replaced. Out of the current 26 FT mathematics faculty, 22 are at the Santa Rosa Campus and 4 are at the Petaluma Campus.

2.3b Full-Time and Part-Time Ratios

Discipline	FTEF Reg	% Reg Load	FTEF Adj	% Adj Load	Description
Mathematics	23.3600	52.0000	21.2700	48.0000	FT overload is computed under Adjunct. Note that 3.33 FTEF was taught by full-time instructors as overload. Some instructors were happy to do this, but others teach overload in order to serve the needs of the department when there are not enough adjunct instructors. Note also that as we have added sections back into our schedule, the percent adjunct load has increased. This does not include reassigned time. (The data provided is only from Fall 2016 and does not take into account Spring or Summer.)

2.3c Faculty Within Retirement Range

Currently, at least 9 of our 25 full-time mathematics faculty are 55 or over. That represents 36% of our FT faculty! We have at least 2 who will retire within 2 years. Several more of these faculty have indicated that they plan to retire soon. In order to make sure that we can hire highly qualified individuals, it is vital that we replace these positions as they are vacated. In recent years, we have a tendency to lose qualified applicants to other institutions prior to holding our interviews. This makes it more difficult to hire more than 1 or 2 top recruits at one time. Furthermore, the latest round of hiring found us offering full-time positions to our adjunct instructors, so we would lose those two out of our adjunct pool. In terms of teaching load, we only gain about 76% of an instructor with the addition of those two.

Since we are barely able to keep up with retirements, much less growth, it is highly likely that we will be cancelling math classes due to lack of instructors. Since the need for math classes is so great, that would be an extreme disservice to students trying to reach their educational goals.

2.3d Analysis of Faculty Staffing Needs and Rationale to Support Requests

We are requesting that, in the upcoming year all retirements be replaced immediately. We had one from fall 2016 and two from the previous year that have not been replaced. I anticipate two or more retirements within two years. These vacancies are all in Santa Rosa and there is a huge need for additional full-time faculty in Santa Rosa.

We are no longer able to grow our course offerings due to a lack of faculty. We are confident that we could fill many additional sections, and were asked by the administration to add for fall '17, but will end up cutting sections due to lack of staff. As of this writing, we have 12 unstaffed sections in Petaluma and 8 unstaffed sections in Santa Rosa. Our last recruitment acquired only 2 Full-time faculty for the 3 positions. Additionally, we would appreciate having additional full-time faculty to help teach and participate in departmental and institutional business.

We have included additional requests beyond the retirees mentioned above on the 2.3e spreadsheet because it asked for the anticipated requests for the next 3 years.

Historically, we have had a difficult time staffing our classes. This is due to a number of reasons that are ongoing.

- Inadequate number of full-time instructors
- Inadequate number of qualified adjunct instructors
- Several full-time mathematics faculty receiving reassigned time for various reasons
- Two sabbaticals in the mathematics department for each semester starting in fall 2017 THROUGH spring 2019
- Current adjunct instructors taking full-time jobs elsewhere or retiring

- Development and implementation of an 8-unit course combining elementary and intermediate algebra (at the request of administration and Student Success, 3 sections). The 3 sections offered represent 1.6 FTEF

It is important that we have enough full-time faculty so that we have the stability to continue to offer as many math classes as we are allowed. The incredible growth in STEM disciplines has required us to add sections of higher level courses, such as Math 4 & Math 1C. These courses are not suitable for adjunct instructors because they require a lot of time and collaboration with colleagues. We expect the need for these courses to continue increasing as the economy improves and the high tech sector grows, both locally and nationally.

2.3e Faculty Staffing Requests

Rank	Location	SP	M	Discipline	SLO Assessment Rationale
0001	Santa Rosa	02	01	Mathematics	Retirement Replacement (Fred Utter)
0002	Santa Rosa	02	01	Mathematics	We are currently decreasing our course offerings due to lack of faculty, while simultaneously being asked to increase course offerings. We cannot grow our schedule with current staffing levels and have several retirements anticipated in the next 3 years.
0003	Petaluma	02	01	Mathematics	(APPROVED FOR 2017-2018 CARRY OVER). Unfilled Recruitment in Petaluma 2016-2017.
0004	Santa Rosa	02	01	Mathematics	We are currently decreasing our course offerings due to lack of faculty, while simultaneously being asked to increase course offerings. We cannot grow our schedule with current staffing levels and have several retirements anticipated in the next 3 years.
0005	Santa Rosa	02	01	Mathematics	We are currently decreasing our course offerings due to lack of faculty, while simultaneously being asked to increase course offerings. We cannot grow our schedule with current staffing levels and have several retirements anticipated in the next 3 years.

2.4b Rationale for Instructional and Non-Instructional Equipment, Technology, and Software

We are in need of a 3-d printer for use by math faculty teaching Math 1B/1C and more.

Students in Math 1B/1C and higher will be able to hold and see the models used in these classes. Instructors can assign projects where students must create these models using mathematical equations programmed into the 3-d printer through a computer. This equipment offers hands-on project based instruction to students, provides experience in technology and innovation and is the future of education. The models are also used in intermediate algebra and pre-calculus to demonstrate systems of equations, conic sections, and more. A supply of materials is needed to make the models.

We are in need of a desktop computer to be used in conjunction with the 3-d printer.

In order to program mathematical equations to build the models, a computer is required for the 3-d printer.

We need a color laser printer to be shared by the Math depart chair and AA. Due to FERPA, confidential and sensitive material cannot be printed from the faculty workroom. The department chair and the AA must have access to such a printer. **(PURCHASED)**

We need new lab chairs for the Math Lab due to many being broken, unclean, or in disrepair.

2.4c Instructional Equipment and Software Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	Santa Rosa	02	01	3-D printer	1	\$4,000.00	\$4,000.00	Bic Ha DoVan	TBD	Tom Falbo
0001	Santa Rosa	04	01	New Elmos (TT 12i) for classrooms	10	\$780.00	\$7,800.00	Bic Ha DoVan	Shuhaw Classrooms	Bic Ha DoVan
0001	Santa Rosa	04	01	Rolling chairs for computer stations	31	\$500.00	\$15,500.00	Marc Rudlin	1733	Bic Ha DoVan
0002	Santa Rosa	02	01	New computer to be used in conjunction with 3-d p	1	\$1,200.00	\$1,200.00	Bic Ha DoVan	TBD	Bic Ha DoVan

2.4d Non-Instructional Equipment, Software, and Technology Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	Santa Rosa	04	07	(PURCHASED) Laser color printer	1	\$350.00	\$350.00	Bic Ha DoVan	1717 Shuhaw	Dinna Withrich

2.5a Minor Facilities Requests

Rank	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description
0001	Santa Rosa	02	01	Urgent	Shuhaw	1733	\$100,000.00	The MathLab is in dire need of cleaning, especially the walls, ceiling and airvents. Refurbishment of wall coverings, vent covers, etc. We service over 1600 students each semester and the room has fallen behind in cleaning and upkeep. For the health and well-being of students, staff and faculty, we need to address this immediately.
0001	Santa Rosa	04	07	Urgent	Shuhaw	Entire Building	\$20,000.00	The entire building needs to be re-keyed due to the number of keys that have been distributed whose whereabouts are now unknown. This is a safety concern that was brought to light by the rapist that had set up camp in a closet in Shuhaw for an unknown length of time.
0002	Santa Rosa	04	07	Urgent	Shuhaw	1738,1740, 1742, 1744, 1746, 1748	\$1,200.00	Carpets in these faculty offices need replacement. See photo taken by STEM dean to show their condition.
0003	Santa Rosa	02	01	Urgent	Shuhaw		\$0.00	(For New STEM Building): New offices for Mathematics Instructors
0003	Santa Rosa	04	07	Urgent	Shuhaw	sewage system	\$0.00	The sewage system occasionally backs up into the hallway next to classroom 1723 and offices 1722, 1724, 1726, and 1728. The last time, the sewage backed up enough to reach all four offices. This an unacceptable, unsanitary situation that must be fixed.
0004	Santa Rosa	04	07	Urgent	Shuhaw	1717	\$0.00	The door to the Mathematics Department office is a fire door and needs to have a magnetic fire door closer installed to comply with fire codes. My understanding is that this is a potential liability for SRJC if not addressed.
0006	Santa Rosa	04	07	1 Year	Shuhaw		\$0.00	Update heating and air conditioning system.

2.5b Analysis of Existing Facilities

- The mathematics part of Shuhaw Hall has difficulty maintaining the proper temperature uniformly throughout the building. New AC splitter units have been a big help, but occasionally have a hard time keeping up.
- In severe weather, the roof tends to leak and ceiling tiles are collapsing. Since there are rats in the crawl space, rat dropping come into the building when tiles collapse. We have had three gaping holes in the ceiling all spring semester, and several large tiles that are on the verge of collapsing.
- Sewage problems coming up from the floors, a foul odor that permeated the entire building causing classes to be canceled.
- There are an unknown number of former instructors who never returned their keys. Since we have no idea what they have done with the keys, Shuhaw is rather insecure.

It might be time to consider building a less problematic facility.

3.1 Develop Financial Resources

3.2 Serve our Diverse Communities

For privacy concerns, I will not comment on the Math Department's faculty and staff diversity in regards to their ethnicities, socio-economic backgrounds, disabilities, sexual orientation, age, and other personal qualities. I can simply say that we are a much more diverse faculty than we were 10 years ago.

In addition, I can assure the reader of this document that we hire and maintain staff and faculty who are extremely sensitive to and knowledgeable of the diverse needs and backgrounds of the students we serve.

The question of how to best serve the many needs of our diverse student population is always of major importance at any interview we conduct. When we recruit for positions in mathematics, we work closely with Human Resources in order to broaden our recruitment and in order to ask questions, both on the written application and at the interview, which will allow us to hire instructors dedicated to the various learning styles and backgrounds of the students in our classes.

Our department has always maintained a very close working relationship with DRD. Not only are we careful to follow all requirements as listed by DRD for each individual student, our faculty work closely with DRD specialists so that each DRD student is accommodated the best way possible.

We know that one model does not serve all when it comes to mathematics instruction, and our instructors consistently work towards shaping our teaching in ways that are best for each of the individuals in the classroom.

We realize that in K-12 education, teachers have been given fewer and fewer individual pedagogical choices in recent years – so much of what and how they teach is now dictated at the statewide level. This is upsetting and rather ironic because how, then, can they individualize their teaching methods in order to help out a wide variety of learning styles in their classrooms?

Fortunately, our mathematics department has been an advocate of not dictating pedagogy. Therefore, each instructor has the freedom – and the responsibility – of striving to best meet the educational needs of each of his or her students.

3.3 Cultivate a Healthy Organization

The Mathematics Department strongly supports the professional development of its classified staff. Staff are encouraged to attend PDA days and other activities promoted by the Staff Development Resource Center and to take seminars, workshops, and instructional courses that enhance professional development.

Faculty in the SRJC Mathematics Department are extremely active in state-wide and national Mathematics organizations, such as CMC3, MAA and AMATYC. Many of the faculty attend colloquia at Sonoma State University and Humboldt State University. We have faculty that regularly serve on committees grading AP Calculus and AP Statistics exams for the entire country. The SRJC Math Department is very well know statewide for it's level of involvement in Professional growth activities and organizations.

3.4 Safety and Emergency Preparedness

Ying Lin continues to be the trained and certified safety leader for the Mathematics Department and Shuhaw Hall.

3.5 Establish a Culture of Sustainability

Most of our instructors have become virtually paperless in class (except for tests of course) and many of them also use online homework systems to reduce paper use.

4.1a Course Student Learning Outcomes Assessment

ASSESSMENT PLAN:

Every sixth year, beginning with the 2010/2011 academic year, the Mathematics Department will assess all mathematics courses and the mathematics major.

Course	SLO #s	Participating faculty	Semester Initiated	Semester Completed	Year of Next Assessment
10	All	Munton	Spring 2014	Fall 2014	2019-20
101	All	Falbo	Spring 2014	Fall 2014	2019-20
15	All	Clark, DoVan, Jones	Spring 2014	Fall 2014	2019-20
150A	All	Ruud, Albers, Kwon	Spring 2014	Fall 2014	2019-20
150B	All	Bach, DoVan, Albers Wheeler, Lin	Spring 2014	Fall 2014	2019-20
151	All	DoVan, Blackburn,	Spring 2014	Fall 2014	2019-20

		Gorgievska, Gooch, Nieto			
155	All	Valenzuela, Kwon, Blackburn, Shell, Martin	Spring 2014	Fall 2014	2019-20
16	All	Bunas, Ferguson	Spring 2014	Fall 2014	2019-20
1A	All	Bach, Kwon, Brown	Spring 2014	Fall 2014	2019-20
1B	All	Kwon, Bunas, Nieto, Martin	Spring 2014	Fall 2014	2019-20
1C	All	Ferguson, Martin, Sturr	Spring 2014	Fall 2014	2019-20
2	All	Gooch	Spring 2014	Fall 2014	2019-20
25	All	Kwon, Jones, Eurgubian	Spring 2014	Fall 2014	2019-20
27	All	Bach, Ohlsen, Gorgievska, Gooch	Spring 2014	Fall 2014	2019-20
4	All	Lin	Spring 2014	Fall 2014	2019-20
5	All	Wheeler, Sturr	Spring 2014	Fall 2014	2019-20
58	All	Utter	Spring 2014	Fall 2014	2019-20
9	All	Martin, Gooch	Spring 2014	Fall 2014	2019-20
49	All	Gooch	Fall 2011	Spring 2012	2017 – 18
70	All	Wheeler	Spring 2014	Fall 2014	2019-20
71	All	Wheeler	Spring 2014	Fall 2014	2019-20
770	All	Albers, Wheeler	Fall 2014	Fall 2014	2019-20
Math for Transfer Major	All		Spring 2014	Fall 2014	2019-20

4.1b Program Student Learning Outcomes Assessment

Program Assessment Plan

In the spring of 2014, SLOs for all math courses were assessed. Once all of the individual courses SLO assessments were in, the Mathematics Major was assessed based on the individual assessment outcomes of the courses.

The Student Learning Outcomes in the Mathematics Major relate to the individual courses within the major according to the chart below.

SLOs	CORE COURSES				PICK ONE	Math 2	Math 4
	Math 1A	Math 1B	Math 1C	Math 5			
Demonstrate the ability to use symbolic, graphical, and numerical representations of mathematical ideas and to communicate mathematical results in a clear, organized and contextually accurate manner	X	X	X	X		X	X

Perform advanced operations with functions of one or more variables, including algebraic, transcendental, and vector-valued; understand the characteristics and graphs of functions; and apply this knowledge to modeling problems	X	X	X		X	
Apply mathematical techniques including solving equations and inequalities, solving systems of equations and inequalities, differentiation, and integration, to problems that arise in the real world	X	X	X	X	X	
Use and apply conic sections, polar graphs, parametric equations, vectors, complex numbers, sequences, and series		X	X			
Engage in logical and critical thinking in mathematics	X	X	X	X	X	X

Most Recent Major Assessment Information

In the spring of 2014, all major courses were assessed. For the courses that did not achieve success, the action deemed appropriate was at the level of the instructor. No changes to the major are indicated at this time.

4.1c Student Learning Outcomes Reporting

Type	Name	Student Assessment Implemented	Assessment Results Analyzed	Change Implemented
Course	Math 1A	Spring 2014	Spring 2014	N/A
Course	Math 1B	Spring 2014	Spring 2014	N/A
Course	Math 1C	Spring 2014	Spring 2014	N/A
Course	Math 2	Spring 2014	Spring 2014	N/A
Course	Math 4	Spring 2014	Spring 2014	N/A
Course	Math 5	Spring 2014	Spring 2014	N/A
Course	Math 9	Spring 2014	Spring 2014	N/A
Course	Math 10	Spring 2014	Spring 2014	N/A
Course	Math 15	Spring 2014	Spring 2014	N/A
Course	Math 16	Spring 2014	Spring 2014	N/A
Course	Math 25	Spring 2014	Spring 2014	N/A
Course	Math 27	Spring 2014	Spring 2014	N/A
Course	Math 49	Spring 2014	Spring 2014	N/A
Course	Math 58	Spring 2014	Spring 2014	N/A
Course	Math 70	Spring 2014	Spring 2014	N/A
Course	Math 71	Spring 2014	Spring 2014	N/A
Course	Math 101	Spring 2014	Spring 2014	N/A
Course	Math150A	Spring 2014	Spring 2014	N/A
Course	Math 150B	Spring 2014	Spring 2014	N/A
Course	Math 151	Spring 2014	Spring 2014	N/A
Course	Math 155	Spring 2014	Spring 2014	N/A
Course	Math 770	Fall 2010	Fall 2010	N/A
Certificate/Major	Mathematics	Spring 2014	Spring 2014	N/A

4.2a Key Courses or Services that address Institutional Outcomes

Course/Service	1a	1b	1c	2a	2b	2c	2d	3a	3b	4a	4b	5	6a	6b	6c	7
Math 10	X	X	X	X				X	X	X	X	X			X	X
Math 101	X	X	X	X				X	X	X	X	X			X	X
Math 15	X	X	X	X				X	X	X	X	X				X
Math 150A	X	X	X	X				X	X	X	X	X				X
Math 150B	X	X	X	X				X	X	X	X	X				X
Math 151	X	X	X	X				X	X	X	X	X				X
Math 155	X	X	X	X				X	X	X	X	X				X
Math 16	X	X	X	X				X	X	X	X	X				X
Math 1A	X	X	X	X				X	X	X	X	X				X
Math 1B	X	X	X	X				X	X	X	X	X				X
Math 1C	X	X	X	X				X	X	X	X	X				X
Math 2	X	X	X	X				X	X	X	X	X				X
Math 25	X	X	X	X				X	X	X	X	X				X
Math 27	X	X	X	X				X	X	X	X	X				X
Math 2A	X	X	X	X				X	X	X	X	X				X
Math 2B	X	X	X	X				X	X	X	X	X				X
Math 4	X	X	X	X				X	X	X	X	X				X
Math 5	X	X	X	X				X	X	X	X	X				X
Math 58	X	X	X	X				X	X	X	X	X				X
Math 6	X	X	X	X				X	X	X	X	X				X
Math 6																
Math 70	X	X	X	X				X	X	X	X	X				X
Math 71	X	X	X	X				X	X	X	X	X				X
Math 770	X	X	X	X				X	X	X	X	X				X
Math 9	X	X	X	X				X	X	X	X	X				X

4.2b Narrative (Optional)

5.0 Performance Measures

The Mathematics Department of Santa Rosa Junior College has as its goal to serve the students efficiently and at the same time keep mathematics education accessible to its students. As a faculty, we work hard to be available to our students, try to keep up on the latest innovations in mathematics as well as that which is used in the teaching of mathematics. I have never worked with a more dedicated faculty anywhere else.

5.1 Effective Class Schedule: Course Offerings, Times, Locations, and Delivery Modes (annual)

We offer a wide variety of times and days for our sections, including weekends and hybrid courses. We offer courses from Elementary Algebra through second year calculus on the Santa Rosa Campus and we offer all courses through first year calculus on the Petaluma Campus. Sadly, because of the lack of chemistry, physics and engineering courses offered at the Petaluma Campus, we are unable to offer second-year courses on the Petaluma Campus since most of those students who would take second-year mathematics courses are forced to take their chemistry, physics and engineering courses on the Santa Rosa Campus thus making the second-year mathematics courses inconvenient to take on the Petaluma Campus.

We are now trying to offer more advanced courses in our evening program. It has been a success and at this time, we are seeing huge increases in the enrollment of these more

advanced mathematics courses. We are hoping that as the Petaluma Campus grows, we will be able to start offering more advanced courses there as well.

We currently are unable to meet the demand for Math 155, Math 15, Math 1A and Math 1B due to a lack of Mathematics faculty. With the decreasing unemployment in Sonoma County we have seen a corresponding decrease in applicants for our adjunct pool. Furthermore, we anticipate 3 - 5 retirements by spring 2015, so we will have to work very hard to maintain the level of services we currently offer, not to mention meet the increasing demand for Mathematics courses. We hope to have approval for some steady, sustained hiring of full-time faculty in the coming years which will allow us to better meet the needs of the students.

Student Headcount:

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Mathematics	1135	5301	5677	1183	5501	5556	956	5262	536

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Mathematics	213	1102	986	186	1083	1025	177	1120	97

5.2a Enrollment Efficiency

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Mathematics	99.6%	118.6%	120.1%	109.9%	120.8%	124.5%	109.1%	122.3%	123.4%

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Mathematics	95.1%	109.3%	113.6%	83.0%	114.0%	118.1%	105.4%	121.2%	119.6%

The enrollment efficiency is both an indication of healthy enrollments and overcrowded classes. Our instructors have taken on more students recently in order to accommodate the increased student populations. This has been a hardship on both our students and our instructors. We need to increase the number of sections of mathematics courses offered so that students can progress in a timely manner. It is also clear that we need to hire more full-time instructors and obtain more classrooms to accommodate our future needs.

5.2b Average Class Size

Nearly all mathematics courses at SRJC have a class enrollment limit of 28 with a 6-student wait list which can generally be accommodated into the class. There are usually more students trying to add than we can accommodate in our classrooms which each hold about 34 students. Some of the numbers below are less than 34 due to attrition, but we begin

each semester with nearly every class completely full and a lot of classes with students on the floor. We need to offer more classes and thus need more full-time instructors to do so.

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Mathematics	27.9	33.2	33.4	30.8	33.9	34.5	30.6	34.3	34.

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Mathematics	26.6	30.6	31.8	23.3	31.9	33.1	29.5	33.9	33.

5.3 Instructional Productivity

Santa Rosa Campus

Mathematics		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
	FTEF	96.12	475.16	512.73	100.15	491.57	510.08	87.35	488.29	502.73
	FTEF	6.44	27.48	29.82	6.07	27.62	28.34	5.39	27.93	28.34
	Ratio	14.91	17.29	17.19	16.49	17.80	18.00	16.22	17.48	17.74

Petaluma Campus (Includes Rohnert Park and Sonoma)

Mathematics		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
	FTEF	29.79	144.80	126.97	26.25	144.24	133.61	25.17	149.97	127.09
	FTEF	2.12	9.24	7.74	2.12	8.73	7.75	1.64	9.54	7.36
	Ratio	14.07	15.68	16.39	12.40	16.52	17.24	15.33	15.72	17.26

The goal for the college is 18.5 which is equivalent to having classes with about 37 students. Since our classrooms can only accommodate up to about 34 students, it is impossible for us to meet the goal of the district without violating fire codes.

We believe that the nature of the mathematics discipline should allow our department to fall below the college-wide goal in this area. Students often find mathematics to be a challenging subject, and when students fail a mathematics course, they are often inclined to drop out of school completely. In order to maintain or increase student success, we should maintain or even decrease class size.

5.4 Curriculum Currency

All curriculum reviews are current. The three courses last reviewed in 2009 are currently in the review process.

MATH 10	4/20/2009
MATH 101	11/14/2011
MATH 15	11/25/2013
MATH 150A	4/8/2013
MATH 150B	4/8/2013
MATH 151	4/8/2013

MATH 155	5/21/2010
MATH 16	3/20/2014
MATH 1A	4/14/2014
MATH 1B	4/14/2014
MATH 1C	10/28/2013
MATH 2	10/28/2013
MATH 25	4/8/2013
MATH 27	4/8/2013
MATH 4	10/1/2012
MATH 49	9/23/2013
MATH 5	9/14/2009
MATH 58	11/4/2013
MATH 6	10/30/2012
MATH 70	4/8/2013
MATH 71	4/8/2013
MATH 770	4/20/2009
MATH 8A	Inactive
MATH 8B	Inactive
MATH 9	3/11/2014

5.5 Successful Program Completion

Mathematics Degree

Associate of Arts Degree	08--09	09-10	10-11	11-12	12-13
Mathematics	11	22	22	18	31

We seem to have an increase in the number of Mathematics degrees awarded in recent years. This may be due to the push at SRJC for having a way to assess "completion" and may also be due to the UCs and CSUs accepting fewer students.

Support for Non-Math Majors

Virtually all of our students take mathematics courses with the goal of completing a certificate, associate degree, or the requirements for transfer to a four-year school. For many students, mathematics is the most challenging subject they will face. And yet the mathematics course success rate (approximately 67%) is only slightly lower than the District average (approximately 74%).

The mathematics department encourages student success by

- Promoting fair access and opportunities for students to take our courses
- Recruiting, securing and retaining faculty who love teaching
- Maintaining a high level of instructional quality and integrity
- Actively cooperating with the Tutorial Center, MESA, Mathematics Computer Lab, DRD, and the Counseling Department to help students outside the classroom

- Challenging students to achieve to the maximum of their abilities, and making certain that each understands the responsibility for her/his own academic success.
- Contributing to the cultural life of our community by presenting enrichment opportunities to our students and to community members.
- Providing comprehensive instructional support services such as well-maintained physical facilities, basic supplies, up-to-date technological equipment, adequate support staff (secretaries, computer specialists, student homework graders, lab instructors, and student lab assistants).

Currently we are focusing on our Basic Skills level students and looking into ways we can increase student success among this group. We have developed a new course, MATH 101, Mathematics for the Associate Degree, that is an alternative to MATH 155 for students who seek an Associate Degree but do not plan on transferring. This may be extremely important for our nursing students and students in other vocational programs.

Our department has been extremely active in the Basic Skills work of the college.

Core to student success is good study habits. The best-proven method of motivating students to do daily homework is to collect and grade homework on a daily basis. This is impossible without student homework graders. We have had student graders in the past, but lost the funding due to budget cuts. The college should make it a priority to promote practices, like the grader program, that will increase student success.

5.6 Student Success

Retention

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Mathematics	72.8%	68.7%	70.6%	74.1%	70.4%	69.5%	78.9%	70.7%	68.2%

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Mathematics	84.7%	72.9%	76.6%	74.2%	73.1%	75.8%	85.8%	78.6%	73.1%

Successful Course Completion

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Mathematics	66.9%	59.7%	62.0%	68.2%	61.7%	60.8%	71.5%	61.4%	59.1%

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Mathematics	78.5%	65.0%	68.5%	64.5%	66.1%	67.3%	77.8%	69.8%	62.6%

GPA

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Mathematics	2.29	2.20	2.26	2.32	2.22	2.21	2.40	2.21	2.2

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Mathematics	2.61	2.35	2.45	2.33	2.45	2.30	2.73	2.51	2.3

It is no secret that mathematics is difficult for many students. There are a variety of reasons for that and we, as mathematics instructors, strive to find ways to help our students succeed. We cannot, however, lower our standards. It is our responsibility to ensure that students who pass our classes are prepared for the subsequent classes. Otherwise, the problem compounds itself. This situation is not unique to SRJC.

Having student graders to give daily feedback on homework is one practice that can improve student success. It seems that the small cost of hiring student graders would be greatly offset by the increase in the student success rates. If fewer students are repeating our courses, more students will be served.

The student equity data did not show any major concerns with student equity within Mathematics. While a certain sub-group may have performed lower than the average in one semester, the opposite can be found true in another semester. The only area that showed consistently lower success in mathematics was the group of Basic Skills English students. This makes sense due to the necessity of good English skills to be successful in any college course.

5.7 Student Access

The students who we served by ethnicity are:

Mathematics	Ethnicity	2010-11	Percent	2011-12	Percent	2012-13	Percent	2013
	White	6821	55.0%	6811	54.8%	6323	52.8%	
	Asian	662	5.3%	636	5.1%	608	5.1%	
	Black	340	2.7%	354	2.9%	304	2.5%	
	Hispanic	2138	17.2%	2422	19.5%	2561	21.4%	
	Native American	108	0.9%	117	0.9%	85	0.7%	
	Pacific Islander	69	0.6%	53	0.4%	49	0.4%	
	Filipino	115	0.9%	143	1.2%	119	1.0%	
	Other Non-White	0	0.0%	0	0.0%	0	0.0%	
	Decline to state	2146	17.3%	1884	15.2%	1918	16.0%	
	ALL Ethnicities	12399	100.0%	12420	100.0%	11967	100.0%	1

The students who we served by gender are:

Mathematics	Gender	2010-11	Percent	2011-12	Percent	2012-13	Percent	2013
	Male	6359	51.3%	6402	51.5%	6015	50.3%	
	Female	5876	47.4%	5845	47.1%	5794	48.4%	
	Unknown	164	1.3%	173	1.4%	158	1.3%	
	ALL Genders	12399	100.0%	12420	100.0%	11967	100.0%	1

The students we served by age are:

Mathematics	Age Range	2010-11	Percent	2011-12	Percent	2012-13	Percent	2013
	0 thru 18	2210	17.9%	2104	17.0%	1844	15.5%	
	19 and 20	3992	32.3%	3920	31.7%	3869	32.4%	
	21 thru 25	3485	28.2%	3635	29.4%	3595	30.1%	
	26 thru 30	1235	10.0%	1220	9.9%	1207	10.1%	
	31 thru 35	523	4.2%	555	4.5%	530	4.4%	
	36 thru 40	309	2.5%	356	2.9%	317	2.7%	
	41 thru 45	211	1.7%	238	1.9%	230	1.9%	

	46 thru 50	185	1.5%	165	1.3%	171	1.4%	
	51 thru 60	216	1.7%	183	1.5%	170	1.4%	
	61 plus	33	0.3%	44	0.4%	34	0.3%	
	ALL Ages	12366	100.0%	12376	100.0%	11933	100.0%	1

Our service to the various groups of students is right in line with that which would be expected. We do our best to provide a positive learning environment for all students.

It appears that we serve male and female students equally and that we have a higher than average served in the cross gender category.

We have more Hispanic students than the average for the county taking mathematics courses. I think the work of Darci Rosales and the MESA center have contributed to this very positively.

5.8 Curriculum Offered Within Reasonable Time Frame

We offer all of our courses every semester, generally with multiple sections of each. We try to have sections of each class available during both day and evening hours. We also offer our two highest demand courses, Math 155 and Math 15, in a weekend college format each semester.

Location	SANTA ROSA CAMPUS
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Updated 08/2

Sum of Enrollment				Semester				
Cluster	Department	Discipline	Course	2010 SU	2010 FA	2011 SP	2011 SU	2011 F
Science, Technology, Engineering & Mathematics	Mathematics	Mathematics	MATH 10	24	77	76	26	
			MATH 101	0	0	0	0	
			MATH 15	183	586	659	176	
			MATH 150A	63	457	386	57	
			MATH 150B	53	206	258	62	
			MATH 151	63	307	326	69	
			MATH 155	146	668	716	150	
			MATH 16	0	30	39	0	
			MATH 1A	69	226	240	80	
			MATH 1B	0	143	159	0	
			MATH 1C	0	79	99	0	
			MATH 2	0	44	70	0	
			MATH 25	19	158	156	19	
			MATH 27	63	233	210	69	
			MATH 2A	0	0	0	0	
			MATH 2B	0	0	0	0	
			MATH 4	0	0	40	0	
MATH 49	0	0	2	0				
MATH 5	0	70	66	0				
MATH 58	0	122	102	0				

			MATH 70	0	10	7	0	
			MATH 71	0	15	11	0	
			MATH 770	242	1064	1046	279	
			MATH 8A	13	57	30	0	
			MATH 8B	0	15	17	0	
			MATH 9	0	85	83	0	
		Mathematics Total		938	4652	4798	987	
	Mathematics Total			938	4652	4798	987	
Science, Technology, Engineering & Mathematics Total				938	4652	4798	987	
Grand Total				938	4652	4798	987	
Location		PETALUMA CAMPUS					Updated -8/2	

Sum of EnrollCen				Semester				
Cluster	Department	Discipline	Course	2010 SU	2010 FA	2011 SP	2011 SU	2011 F
Science, Technology, Engineering & Mathematics	Mathematics	Mathematics	MATH 10	0	57	57	0	
			MATH 15	82	228	217	76	
			MATH 150A	25	139	143	19	
			MATH 150B	0	61	95	0	
			MATH 151	30	124	50	24	
			MATH 155	76	303	244	67	
			MATH 1A	0	21	41	0	
			MATH 1B	0	23	12	0	
			MATH 25	0	24	26	0	
			MATH 27	0	39	38	0	
			MATH 58	0	31	29	0	
			MATH 9	0	28	31	0	
			Mathematics Total			213	1078	983
Mathematics Total								
Science, Technology, Engineering & Mathematics Total								
Grand Total								

Location		SANTA ROSA CAMPUS					Updated 08/2	
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Count of Course				Semester				
Cluster	Department	Discipline	Course	2010 SU	2010 FA	2011 SP	2011 SU	2011 F
Science, Technology, Engineering & Mathematics	Mathematics	Mathematics	MATH 10	1	3	2	1	
			MATH 101	0	0	1	0	
			MATH 15	7	20	19	7	
			MATH 150A	2	18	12	2	
			MATH 150B	2	6	8	2	
			MATH 151	2	10	10	2	
			MATH 155	5	22	20	5	
			MATH 16	0	1	1	0	
			MATH 1A	2	7	7	2	
			MATH 1B	0	5	5	0	
			MATH 1C	0	3	3	0	
			MATH 2	0	2	2	0	

			MATH 25	1	5	5	1
			MATH 27	2	7	6	2
			MATH 2A	0	0	0	0
			MATH 2B	0	0	0	0
			MATH 4	0	0	1	0
			MATH 49	3	3	3	3
			MATH 5	0	2	2	0
			MATH 58	0	4	3	0
			MATH 70	0	1	1	0
			MATH 71	0	1	1	0
			MATH 770	1	1	1	1
			MATH 8A	1	2	1	1
			MATH 8B	0	1	1	0
			MATH 9	1	3	3	0
			Mathematics Total	30	127	118	29
			Mathematics Total	30	127	118	29
			Science, Technology, Engineering & Mathematics Total	30	127	118	29
			Grand Total	30	127	118	29

Location	PETALUMA CAMPUS
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Count of Course				Semester						
Cluster	Department	Discipline	Course	2010 SU	2010 FA	2011 SP	2011 SU	2011 F		
Science, Technology, Engineering & Mathematics	Mathematics	Mathematics	MATH 10	0	2	2	0			
			MATH 15	3	7	6	3			
			MATH 150A	1	5	5	1			
			MATH 150B	1	2	3	0			
			MATH 151	1	5	2	1			
			MATH 155	4	9	7	3			
			MATH 1A	0	1	1	0			
			MATH 1B	0	1	1	0			
			MATH 25	0	1	1	0			
			MATH 27	0	2	1	0			
			MATH 58	0	1	1	0			
			MATH 9	0	1	1	0			
					Mathematics Total	10	37	31	8	
					Mathematics Total	10	37	31	8	
		Science, Technology, Engineering & Mathematics Total	10	37	31	8				
		Grand Total	10	37	31	8				

5.9a Curriculum Responsiveness

We offer a very standard mathematics curriculum. The only lower division course that we do not offer that a small number of our students who are Mathematics Majors would like to take is a course in Logic and Proof. We have developed this course and it is active but the two times we have offered it the enrollment has been far too low for the class to run.

The rest of our curriculum remains robust in order to satisfy the myriad transfer needs of our students.

5.9b Alignment with High Schools (Tech-Prep ONLY)

Through the Cal-PASS program, we had been meeting with local high school instructors to determine our mutual expectations. We have implemented an assessment project that the high schools use to determine the readiness of incoming students to Santa Rosa Junior College. We have also sponsored the JUMP-Start program which allows students to review specific areas of mathematics to prepare the students to assess into more advanced mathematics courses at Santa Rosa Junior College. This will help these students to move through the mathematics curriculum more quickly.

Since not all high schools teach the curriculum in the same way, we give our newly entering students from high school a placement exam that will properly place them into the mathematics curriculum at Santa Rosa Junior College.

5.10 Alignment with Transfer Institutions (Transfer Majors ONLY)

We have been meeting on a yearly basis with the Professors at Sonoma State University and part of our discussions center around curriculum. We take the time to check in with our most common transfer universities like SSU, UCD, UCB, UCSC, UCSB, Cal-Poly SLO, SFSU, CSUS, HSU among others in order to see how they handle their lower division courses. We are in alignment with most of these programs.

Our current transfer courses align with those of the CSUs and UCs. We are in the process of creating a Mathematics For Transfer degree and we continue to align our transfer courses with the C-ID descriptors in order to receive state approval of the courses and the Math for Transfer major.

5.11a Labor Market Demand (Occupational Programs ONLY)

Not applicable.

5.11b Academic Standards

It is always the goal of the Mathematics Department to ensure that the proper academic standards are maintained to insure the success of our transfer students. Periodic checks of our curriculum's alignment with our numerous transfer institutions are made and when we notice a problem we make sure that the problem is addressed so that our students will transfer seamlessly. The SRJC Math department has very rigorous academic standards. It is important to us that students who take our courses can succeed in subsequent courses at any institution. In light of the current push to get students through this institution quickly, and with an evolving

definition of success that seems to be less about education and more about completion, we will have to work hard to maintain our high standards.

6.1 Progress and Accomplishments Since Last Program/Unit Review

Rank	Location	SP	M	Goal	Objective	Time Frame	Progress to Date
0001	Santa Rosa	01	01	We hope to have the Math lab funded in a more reliable and permanent method.		6 months	Funds to provide additional Lab Instructors and Student or Classified Lab Assitants.
0002	Santa Rosa	02	01	Successfully offer Math 6 and coordinate with SSU to make sure that the students are being well-served by the course.	Advertise that we plan to offer Math 6 in the spring to try to get enough students for it to run.	1 year	none
0003	Santa Rosa	01	01	The Math lab is in need of additional student lab workers. The lab is very popular and one instructor needs several assistants to meet the need.	We will push for additional funding for student assistants in the Math lab	6 months	Funds to provide additional Student or Classified Lab Assitants.

6.2a Program/Unit Conclusions

Location	Program/Unit Conclusions
ALL	Our students continue to find it difficult to get their mathematics requirements completed due to increasing demand for classes. We have added as many sections as we are able to staff, but the demand still far exceeds our capacity. Our faculty need is going to become dire in a semester or two. We will be lucky to keep up with upcoming retirements, not to mention meet the students' needs by growing our full-time faculty.

6.2b PRPP Editor Feedback - Optional

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6.3a Annual Unit Plan

Rank	Location	SP	M	Goal	Objective	Time Frame	Resources Required
0001	Santa Rosa	01	01	We hope to have the Math lab funded in a more reliable and permanent method.		6 months	Funds to provide additional Lab Instructors and Student or Classified Lab Assitants.
0002	Santa Rosa	02	01	Successfully offer Math 6 and coordinate with SSU to make sure that the students are being well-served by the course.	Advertise that we plan to offer Math 6 in the spring to try to get enough students for it to run.	1 year	none
0003	Santa Rosa	01	01	The Math lab is in need of additional student lab workers. The lab is very popular and one instructor needs several assistants to meet the need.	We will push for additional funding for student assistants in the Math lab	6 months	Funds to provide additional Student or Classified Lab Assitants.