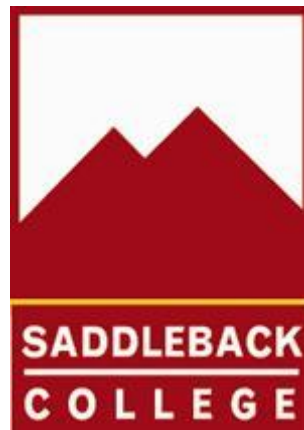


Saddleback College Program Review for Mathematics



Submitted on November 8, 2010

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Program Review Checklist

Completed	Action
x	Contact EPA Chair for orientation
x	Form Program Review Team (PRT)
x	Gather documents (Org Chart/Staffing Profile/SLO Assessment Forms/Data Sets)
x	Solicit input from faculty and students
x	Determine if additional research is needed
x	Contact College Research Specialist if necessary
x	Write Program Review report
x	Submit report to Dean and EPA Chair for review
x	Report submitted to Academic Senate for acceptance
x	Report submitted to the President and the Vice President of Instruction
x	Report posted to the EPA website
	Presentation to the Consultation Council

Section I: Program Overview

A. The Mission of the Program and its Link to the College's Mission, Vision, and Strategic Directions

The mission of the Mathematics Program is to provide high-quality courses that foster student learning and success in improving their basic mathematics skills to the level required for the associate degree, vocation programs, and/or transfer to four-year institutions and to provide interested students the mathematics skill needed for success in upper division courses in mathematics and mathematics related fields. This mission directly links to the College's mission, vision and strategic direction.

B. Historical Background and Unique Characteristics of the Program

The Mathematics Program began with the opening of Saddleback College in 1968. At that time, there were two full-time instructors, James Thorpe and Jean Vincenzi. The following year the department increased by two more with the hiring of Cal Nelson and Ryburn (Bart) Bartlett. In 1971, Tom Meyer joined the team followed by Sue Knights in 1974. Over the years, the department has grown to its current size of 17 full-time professors.

In 1968, there were no permanent buildings at Saddleback College. Mathematics courses were offered in portables that have since been demolished. The current Science & Mathematics Building was dedicated in November of 1974. In 1968, Saddleback College was on the quarter system. The mathematics courses that were offered this first year were Math AB: Elementary Algebra and Geometry, Math C: Trigonometry, Math D: Intermediate Algebra, Math 1A: College Algebra, Math 1B: College Algebra and Analytic Trigonometry, Math 3A, 3B, and 3C: Analytic Geometry and Calculus Series, Math 5: Methods and Concepts of Mathematics, Math 10: Introduction to Statistics, Math 12: Introduction to Modern Mathematics, Math 15: Introduction to Computer Programming, Math 50 and 50T: Basic Mathematics, Math 60A: Beginning Slide Rule and Math 60B: Advanced Slide Rule. In 1976, Saddleback College changed to the semester system and, in 1978; Computer Science became a separate department.

The Saddleback College Mathematics Program is comparable to the lower division mathematics programs offered at most four-year colleges and universities in the United States. In particular, the Mathematics Department strives to maintain a close relationship between the Saddleback College Mathematics Program and the mathematics curriculum at the various branches of the University of California (UC) and

the California State University (CSU) because these institutions are the primary destinations for Saddleback College transfer students.

Unlike the lower division classes offered at most major universities and many other local community colleges, the Mathematics Program at Saddleback College utilizes small sizes (i.e. under 46 students) for all class sections of its courses. The lower division mathematics classes at the various branches of UC and CSU are generally offered in the large lecture format with an attached smaller sized discussion section. The lecture sections usually have 200 or more students and are taught by the class professor. The discussion sections are led by teaching assistants who are graduate students. These teaching assistants are normally responsible for grading the class exams and providing individual guidance to the students. All mathematics classes at Saddleback College are offered in small lecture sections that have maximum enrollments of either 40 or 45 students depending on the size of the classroom. The class professor is present at all class meetings and is solely responsible for grading the class exams and providing individual guidance to the students. Because the Mathematics Program uses small sized classes, the faculty member assigned to each class can more effectively focus on the individual learning needs of the students in that class. Students at Saddleback College are very appreciative of the personal efforts that the faculty members use to further their learning and publicly praise the quality of education they receive through the Saddleback College Mathematics Program.

The Mathematics Program employs state-of-the-art computer and video projection equipment to supplement the instruction and learning of students. This equipment is available in the various mathematics classrooms for instructor demonstrations. Further, this equipment is available in the Computer Science Laboratory for the use of students enrolled in mathematics classes. In this laboratory setting students have the freedom to experiment with the concepts presented in the lecture portion of their class. Several classes require learning activities to be completed by students using the equipment available in the laboratory.

The Mathematics Program also offers online class sections that enable students to take mathematics classes who otherwise would not have the ability to participate because of class location or schedule conflicts with the students' work or family obligations. Many of these students work full-time, have recently moved out-of-state, are on military assignment or are enrolled in the semester abroad program. Also available to students is a free online support resource called Algebra2go[®]. Algebra2go[®] offers free resources for pre-algebra and beginning algebra students who need help outside of the classroom. The tutoring aides include video lectures and worksheets, homework, study guides and hand-written class notes. Many

of the resources are available in both English and Spanish. The team that developed these materials was led by Saddleback College Mathematics Professor Larry Perez. The Algebra2go[®] project has earned several domestic and international awards. Most recently, the Algebra2go[®] project received the Sloan Consortium (Sloan-C) Effective Practice Award. Sloan-C is an organization dedicated to integrating online education with traditional teaching methods.

C. Progress Since the Last Program Review

The recommendations produced in the 2005 Mathematics Program Review were classified into three areas: Faculty and Staff, Facility Improvements, and Course Scheduling and Curriculum Enhancements. The following is a summary of the Mathematics Department's progress since the last program review, pertaining directly to those key recommendations.

Faculty and Staff

The Mathematics Department continues to actively recruit and hire highly qualified adjunct faculty in order to meet the need for replacement faculty. This satisfies the recommendation from the 2005 Program Review. However, it was also a recommendation that the Mathematics Department continue to aggressively pursue additional full-time faculty with the goal to increase its full-time members from eighteen to at least twenty-five. Due to College budget constraints, the Mathematics Department was not allowed to increase the number of its full-time members.

Facility Improvements

All of the recommended facility improvements from the 2005 Program Review have been put on hold until the new Sciences Building is built and occupied, thereby allowing the current Science & Mathematics Building to be renovated per the Mathematics Department's recommendations. The date for the initiation of construction of the new Sciences Building is unknown. Therefore, none of the following student and faculty spaces were made available to the Mathematics Program as recommended.

- (1) at least five additional dedicated lecture rooms for mathematics classes
- (2) a mathematics computer classroom with a capacity of forty-five students
- (3) a quality mathematics student testing area
- (4) a modern mathematics computer laboratory facility
- (5) at least seven more faculty offices

Moreover, none of the following recommended renovations and repairs were completed.

- (6) soundproof walls placed between SM 309A and SM 309B
- (7) soundproof walls placed between SM 122 and SM 123

Course Scheduling and Curriculum Enhancements

It was recommended in 2005 that the Physics Department adjust their scheduling of Physics 4B and Physics 4C so as not to cause a scheduling conflict for students needing to be concurrently enrolled in Math 26 or Math 24, respectively. The Physics Department has since adjusted their scheduling, so there is no longer a conflict for concurrently enrolled mathematics students.

As the Mathematics Department predicted in the 2005 Program Review, the minimum mathematics requirement for an associate degree in California has been increased to successful completion of a mathematics class requiring beginning algebra as a prerequisite (effective for all students admitted for the Fall 2009 term or any term thereafter). A 3-unit intermediate algebra course (Math 255) was created to complement the existing 5-unit intermediate algebra course (Math 253) and mitigate the additional mathematics course units required for many students seeking the associate degree under the new California minimum requirements. The target population for the “accelerated” class (Math 255) consisted of students with a strong background in beginning algebra. However, Math 255 generated little interest amongst Saddleback College students. Math 255 class sections suffered extremely low enrollment. The Mathematics Department offered this course at various times of the day and night and in the summer session without success. Therefore, Math 255 will be deleted from the course catalog effective Fall 2011. In order to provide an alternative to Math 253 for students seeking a class to satisfy the associate degree mathematics requirement, the Mathematics Department created Math 205 “Math for the Associate Degree,” a 3-unit mathematics survey course emphasizing problem solving in various real world situations. Math 205 was first offered in Spring 2010 and will be offered again in Spring 2011.

D. Discussion of How SLOs Have Been Utilized by the Program

The Mathematics Program is in full compliance with the WASC accreditation standards for Student Learning Outcomes (SLOs). The Mathematics Program has 9 program level SLOs that are assessed on a rotating basis. Each mathematics course has 3 SLOs and these SLOs have been written so that the Mathematics Department faculty can track student success in three basic areas: computation, critical thinking, and graphing. Further, the Mathematics Department has chosen related topics for consecutive classes in order to track student progress as they move through the mathematics curriculum.

The mathematics program-level SLOs allow the Mathematics Program to focus on the four different student populations served: students enrolled in non-transferable basic skills and algebra classes, students enrolled in terminal transferable mathematics classes, students enrolled in the business calculus sequence, and students enrolled in the calculus sequence. The program SLOs are linked to the course-level SLOs, so that the faculty can assess each group of students in the areas of computational skills, critical thinking, and graphing.

The Mathematics Department uses the SLO results each year to spark department-wide pedagogical discussions about how to better serve mathematics students. Mathematics Program faculty members routinely develop supplemental materials for student use based on needs identified in these discussions and observations made while working directly with students. These materials are shared amongst all Mathematics Program faculty members who then use them as appropriate in their classes. In this way the constantly changing needs of mathematics students identified through the use of SLOs and faculty observations are addressed throughout the population of mathematics students.

E. Current Strengths, Opportunities, and Challenges

Strengths

The Mathematics Program strives to maintain the integrity of Saddleback College academic standards and achieve consistency in instruction amongst courses offered. The methods used to maintain academic integrity include:

- (1) All faculty members follow the course outline approved by the Saddleback College Curriculum Committee. The Mathematics Department Chair and the Mathematics, Science and Engineering Division Dean have the responsibility for insuring that all faculty members follow the course outline.
- (2) Most faculty members use the same assessment tools. Students' grades are based on a final exam, three to five multi-chapter exams, frequent quizzes and assigned homework exercises.

Technology is widely used in the Mathematics Program and mathematics faculty members are encouraged to use and experiment with new and innovative teaching methods. Uses of innovation and technology include: Course information such as syllabi, homework problems, tutorials, pretests, and course supplements can be found on class websites or on Blackboard.

- (1) Video lectures, video worksheets, a collection of homework problems with solutions, a complete set of class notes and study tips and guidelines for the pre-algebra (Math 351) and beginning algebra

(Math251) classes are available through the free website Algebra2go®, hosted by Saddleback College. The leader of the team that developed these materials was mathematics professor Larry Perez.

- (2) Pre-algebra (Math 351), beginning algebra (Math 251) and intermediate algebra (Math 253) are offered in an online format to accommodate working students and other students who are unable to attend the traditional classes offered on campus.

Unlike many lower division classes offered at most major universities and many other local community colleges, all on-campus mathematics classes at Saddleback College are offered in small lecture sections that have maximum enrollments of 40 or 45 depending on the particular classroom utilized. Smaller sized classes allow faculty members to more effectively focus on the individual learning needs of the enrolled students.

Opportunities

The Mathematics Program offers scholarships to students who have a high level of mathematical proficiency at Saddleback College. A committee of mathematics professors is formed each year to select the most qualified recipients. The number of scholarships and the amount of each scholarship are determined based on the available funds and the quality of the candidates.

Challenges

Some of the challenges the Mathematics Program may face over the next few years include:

- (1) Acquiring classrooms and full-time mathematics faculty to offer more sections of mathematics courses in order to satisfy the high demand for these classes from students in and around the local community.
- (2) Funding a mathematics lab to offer mathematics tutoring and special accommodated testing.
- (3) Funding the purchase of computers to be placed in the mathematics lab.

Section II: Review Report

A. Faculty and Staff

The Mathematics Department faculty at Saddleback College consists of seventeen full-time and thirty part-time instructors. The full-time to part-time faculty ratio for class sections offered by the Department is currently about 50:50. The ratio of full-time faculty to part-time faculty for class sections of Beginning Algebra (Math 251) and Intermediate Algebra (Math 253) is about 44:66 and for the ratio for class sections of Pre-Algebra (Math 351) is about 20:80. The high proportion of part-time faculty used to staff these courses is significant because approximately 60% of the students enrolled in mathematics classes at Saddleback College are enrolled in Pre-Algebra, Beginning Algebra, or Intermediate Algebra. The classes with the most at-risk students are being taught primarily by part-time instructors. The department needs to increase the number of full-time faculty in order to increase the proportion of full-time faculty available to these students. The continued hiring of full-time faculty is also necessary to fill vacancies due to retirements and to accommodate the College's growing student population.

B. Curriculum and Instruction

The courses offered through the Mathematics Department fulfill a student's requirement to earn one or more of the following: an associate degree, a vocational certificate, or transfer to a four-year college (a complete list is shown in the Table 2.1). Also indicated in Table 2.1 are those courses that allow certification of the Area B4 general education requirement for CSU and the Area 2 mathematical concepts and quantitative reasoning requirement of the Intersegmental General Education Transfer Curriculum (IGETC). The Mathematics Department continues to review the Mathematics Program curriculum through discussions in monthly department meetings and uses student learning outcomes (SLOs) to ensure that the Mathematics Program curriculum fulfills the needs of its students. A formal evaluation of each mathematics course takes place at least every five years under the guidance of the Saddleback College Curriculum Committee.

Table 2.1
Mathematics Courses Offered at Saddleback College

Course	Course Title	Course Outline Update Date	Degree Support and Transferability
Math 351	Pre-Algebra Mathematics	Fall 2009	<ul style="list-style-type: none"> Neither associate degree applicable nor transferable
Math 251	Beginning Algebra	Fall 2009	<ul style="list-style-type: none"> Neither associate degree applicable nor transferable
Math 251A	Beginning Algebra Part 1	Fall 2009	<ul style="list-style-type: none"> Neither associate degree applicable nor transferable
Math 251B	Beginning Algebra Part 2	Fall 2009	<ul style="list-style-type: none"> Neither associate degree applicable nor transferable
Math 205	Math for the Associate Degree	Fall 2009	<ul style="list-style-type: none"> Associate degree applicable but not transferable
Math 253	Intermediate Algebra	Fall 2009	<ul style="list-style-type: none"> Associate degree applicable but not transferable
Math 7	College Algebra	Fall 2009	<ul style="list-style-type: none"> IGETC area 2 CSU area B4
Math 8	College Algebra for Brief Calculus	Fall 2009	<ul style="list-style-type: none"> IGETC area 2 CSU area B4
Math 9	Finite Mathematics	Fall 2009	<ul style="list-style-type: none"> IGETC area 2 CSU area B4
Math 10	Introduction to Statistics	Fall 2009	<ul style="list-style-type: none"> IGETC area 2 CSU area B4
Math 124	Trigonometry	Fall 2009	<ul style="list-style-type: none"> CSU area B4
Math 11	A Brief Course in Calculus	Fall 2009	<ul style="list-style-type: none"> IGETC area 2 CSU area B4
Math 2	Pre-Calculus Mathematics	Fall 2009	<ul style="list-style-type: none"> IGETC area 2 CSU area B4
Math 3A	Analytic Geometry and Calculus	Fall 2009	<ul style="list-style-type: none"> IGETC area 2 CSU area B4
Math 3B	Analytic Geometry and Calculus	Fall 2009	<ul style="list-style-type: none"> IGETC area 2 CSU area B4
Math 3C	Analytic Geometry and Calculus	Fall 2009	<ul style="list-style-type: none"> IGETC area 2 CSU area B4
Math 26	Introduction to Linear Algebra	Fall 2009	<ul style="list-style-type: none"> IGETC area 2 CSU area B4
Math 24	Elementary Differential Equations	Fall 2009	<ul style="list-style-type: none"> IGETC area 2 CSU area B4

Table 2.2
Mathematics Courses Prerequisites

Course	Corequisite	Prerequisite
Math 351	None	None
Math 251	None	Math 351
Math 251A	None	Math 351
Math 251B	None	Math 251A
Math 205	None	Math 251
Math 253	None	Math 251
Math 7	None	Math 253
Math 8	None	Math 253
Math 9	None	Math 253
Math 10	None	Math 253
Math 124	None	Math 253
Math 11	None	Math 8
Math 2	None	Math 124
Math 3A	None	Math 2
Math 3B	None	Math 3A
Math 3C	None	Math 3B
Math 26	None	Math 3B
Math 24	None	Math 3C
Math 924	Math 24	None

Table 2.3
Mathematics Courses Required by Various Saddleback College
Associate Degree Programs

Mathematics Course Requirement	Associate Degree
Math 251, 253	Biology, Chemistry
Math 3A, 3B, 3C, 24, and 26	Engineering, Physics
Math 3A or Math 11 Math 3B or Math 10	Economics
Math 3A and 3B	Astronomy, Computer Science, Geology
Math 3A, 3B, 3C, Math 10	Oceanography
Math 10	Anthropology, Psychology, Sociology
Math 11	Business

The Mathematics Department has created four new courses since the last program review in 2005: Beginning Algebra Part 1 (Math 251A), Beginning Algebra Part 2 (Math 251B), Math for the Associate Degree (Math 205), and Intermediate Algebra – Accelerated (Math 255). The two-semester Beginning Algebra courses (Math 251A & 251B) were first available to students in the 2008-2009 academic year and together are equivalent to Math 251 (the one semester Beginning Algebra course). The courses were designed for students who struggle with the fast pace of the single semester Beginning Algebra class. Mathematics for the Associate Degree (Math 205) was developed in response to the State of California changing the minimum mathematics requirement for an associate degree from Beginning Algebra to any course that has Beginning Algebra as a pre-requisite. The accelerated Intermediate Algebra course (Math 255) was offered for two academic years (2006-2007 and 2007-2008); however, the math department decided to delete the course from the curriculum due to extremely low enrollments.

A new honors section of Calculus I (Math 3A) was added to the schedule in Fall of 2009. In addition, a split section of Calculus II (Math 3B) will be offered in the Spring 2011 semester to accommodate both honors and regular students.

The Mathematics Program has proven to be extremely productive in comparison to the remainder of the College. Math classes are consistently full each semester with current fill rates at approximately 96% (see Table 2.4 below). The strengths of the program include a dynamic and outstanding faculty who continually strive to increase student success, small class sizes, strong course offerings at varying levels, and a high productivity level. The weaknesses of the program include the limited number of classroom spaces available for instructional purposes and the lack of oversight of the math tutors located in the Learning Assistance Program (LAP).

Table 2.4
Course Fill Rates and Productivity

	Academic Year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Course Fill Rates for Mathematics Program	89.6%	90.8%	91.9%	95.9%	96.2%
Course Fill Rates for Saddleback College	66.1%	67.4%	68.3%	70.7%	74.1%
Productivity (WSCH/FTEF) for Mathematics Program	671	687	682	703	707
Productivity (WSCH/FTEF) for Saddleback College	538	535	531	546	559

C. Student Success

Due to economic reasons, students are returning to college to enhance their education and improve their career opportunities. For many of these students, and also for many recent high school graduates, mathematics was and continues to be a difficult subject. The small classes available at Saddleback College are essential to transform anxious mathematics students into successful and confident college graduates. Each faculty member gets to know his/her students and is therefore able to recommend useful services available to all students on campus. Faculty members routinely recommend that a struggling student utilize the free tutoring available through the Learning Assistance Program (LAP). Many students will be encouraged to meet with a counselor in the Special Services Department concerning their repeated difficulty in learning mathematical concepts. These meetings may lead to the diagnosis of some students as having a learning disability, which would then allow these students to participate in the educational accommodations provided by the Special Services Department.

The mathematics faculty does an excellent job teaching their students; however they do not have enough classrooms or full-time faculty members to meet the growing needs of the College community. Five to twenty-five petitioning students are asked to look for a different class section on the first day of class each semester because the class section they are petitioning is full. Many of these students aren't able to enroll in another section and must wait a semester or more before they can enroll in their needed mathematics class. The knowledge they had from their previous mathematics class fades with time and when the student finally can enroll in a mathematics class, he/she will struggle to remember the information that was learned in the prerequisite course. It is essential that Saddleback College students be able to take mathematics classes in successive semesters until they achieve their academic goal. This will not be possible for many of our students until more classroom space is made available for mathematics classes and more full-time faculty are added to the Mathematics Department.

Table 2.5
Mathematics Program Enrollment, Success, and Retention

	Academic Year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Total Enrollment in Mathematics Courses	9,474	9,597	9,678	10,188	10,565
Average Course Term Retention Rate	80.4%	79.6%	80.7%	80.2%	81.5%
Average Successful Course Completion Rate	52.6%	51.9%	52.5%	52.8%	56.3%

D. Facilities, Technical Infrastructure, and Resources

The Mathematics Program needs a new building. It is unable to fulfill its mission to the best of its ability for the following reasons:

- (1) More classrooms are needed in order to be able to offer more sections of mathematics courses.
- (2) More full-time faculty members are needed to teach these additional class sections.
- (3) More office space is needed to house the new faculty members.
- (4) A mathematics learning center complete with testing rooms and a mathematics center coordinator is needed.

Section III: Needs Assessment and Annual Update

A. Statement of Program's Current Situation (maximum of 3-4 sentences)

The Mathematics Program is currently staffed by 17 full-time faculty (15 of these are tenured) and 30 adjunct faculty members. A majority of the tenured mathematics faculty will be eligible for a sabbatical leave for the 2011-2012 academic year. During the Fall 2010 semester, 53 class sections (3 of which were online courses) were taught by full-time faculty members while members of the adjunct faculty taught 60 class sections. The mathematics curriculum is supported by a computer lab supervised by a full-time faculty member from the Computer Science Department.

B. Human Resource Needs

The student population at Saddleback College continues to grow and demand an increasing number of mathematics class sections. All class sections offered by the Mathematics Department are filled to capacity and more full-time faculty is needed to meet this growing demand. Full-time faculty members are also needed to replace retiring instructors. The Mathematics Department continues to actively recruit qualified adjunct faculty.

C. Instructional/Service Needs

The Mathematics Program needs a Mathematics Learning Center as described in the Facility Needs portion of this section (see (part F below). As an integral part of the Learning Center, a full-time coordinator and support staff (including tutors and test proctors) is needed.

At the present time, one full-time mathematics faculty member, Patty Wallin, teaches online mathematics courses: Math 351 (Pre-Algebra), Math 251 (Beginning Algebra), and Math 253 (Intermediate Algebra). In order to further expand online offerings, training and support are needed for additional instructors.

The Mathematics Department has site licenses for mathematical software such as *MathType* and *Mathematica* and there is a recurring cost required to keep the licensed software updated. Student lab fees associated with Math 3A, 9, and 10 have been used in the past for this purpose. It is anticipated that additional software will be needed in the future, especially when the Mathematics Learning Center becomes operational. Additional funding sources may be required to purchase and update this additional software.

D. Research Needs

Research should be conducted to see what could be done to improve retention of students who enroll in mathematics courses at Saddleback College.

A research study needs to be completed that will determine if students, who successfully complete a mathematics course and wish to enroll in a subsequent mathematics class, can find an open section of that subsequent course at Saddleback College in which to enroll. It is undesirable for Saddleback College mathematics students to seek classes at other local community colleges due to lack of availability of those classes at Saddleback College.

Research should be done to see how much accommodated mathematics testing is needed and how the Mathematics Department can assist the Special Services Department in providing for the needs of these students.

E. Technical Equipment and Other Resource Needs

Technology has become an increasingly important part of the mathematics learning environment in recent years. To satisfy its technological needs, the Mathematics Program will need adequately equipped computer and technology labs and classrooms with individually networked presentation systems. Each of these labs and classrooms must accommodate 45 students and have adequate space for technologically enhanced workstations and the associated support equipment.

The envisioned Mathematics Learning and Resource Center (MLRC) will need to be well equipped. There must be a networked computer system that includes the student check-in computer, a computer and all-in-one printer located at a staffed island, computers in mathematics faculty and staff offices, both a printer and scanner in the MLRC Printing Center, computers in the MLRC technology based study room, and computers in the MLRC Resource and Library rooms. In addition, networked computers, a board system, and a presentation system will be needed for the MLRC computer lab.

Throughout all of the Mathematics Program facilities, there must be the capability for students to connect to the appropriate level of the mathematics curriculum network using their portable computation and communication devices.

F. Facilities Needs

The Mathematics Program has used ten rooms in the Science and Mathematics Building at close to maximum utilization during the past five years. Consistent growth in the student population has caused essentially all mathematics class sections to be filled weeks before the first day of classes each semester. Anticipated future growth will only exacerbate this situation. To accommodate current student demand as well as anticipated future growth, at least five additional mathematics classrooms are required and at least one dedicated classroom that has immediate access to a separate

computer and technologically equipped lab is needed. Each classroom and lab must accommodate 45 students, with adequate space for technologically enhanced desks and necessary support equipment.

The Mathematics Program also runs at capacity relative to faculty workspace. To accommodate the needed growth of the number of faculty assigned to the Mathematics Department, it is recommended that seven additional faculty offices in the vicinity of the existing mathematics faculty offices be made available to the Mathematics Program.

Saddleback College currently staffs a general learning center that supports all subject areas. This center is managed by the Learning Assistance Program (LAP). While it meets the needs of some students enrolled in mathematics courses, it falls short of the overall study and tutorial needs for the majority of Saddleback College mathematics students. The Mathematics Program needs a Mathematics Learning and Resource Center (MLRC) within close proximity of the mathematics classrooms, the mathematics lab, and the mathematics faculty offices. Such a facility would allow better access by students and faculty to the various Program resources and would significantly enhance student learning at every level of the Mathematics Program. For example, the MLRC would allow student tutoring to be more closely coordinated with the mathematics classes and would be enhanced by even more direct involvement of mathematics faculty members than is currently the case. The LAP would continue to provide additional access to tutoring for students enrolled in basic skills and associate degree applicable mathematics classes who find its location convenient or who are also participating in tutoring programs for other disciplines.

Additional facilities located within the MLRC will be offices for the center coordinator and for the center support staff, an adjunct faculty office which can be used by the adjunct faculty to hold office hours, a general study gallery for non-tutor based individual and group study, a room for technology based studying, two small testing rooms, and a larger testing room, four group study rooms of varied size, a resource room, a library, and a printing center. It is anticipated that two of the group study rooms will accommodate six students, one study room will accommodate fifteen students, and one study room will accommodate 30 students that can be used by faculty members for class review sessions, or by tutors assigned to a course for review sessions. The three testing rooms will be constructed in such a way to meet the needs of the accommodated testing function

Due to problems with the availability of accommodated test proctoring through the Special Services Department that seem to reoccur every few years, arrangements should be made for quiet testing rooms and the associated proctoring personnel within the confines of the Mathematics and Science Building in the near future and prior to the renovation of this building and the

construction of the MLRC. These facilities should be equipped to provide accommodated testing for approximately 500 exams and quizzes each semester based on usage estimates for the Fall 2010 semester.

The repair of current structural and ventilation problems within the Science and Mathematics Building must be addressed during the renovation of the building that is scheduled to begin after completion of a new Sciences Building. It is recommended that the Science & Mathematics Building renovation be given highest priority in the College facilities planning process and that the additional mathematics classrooms, the mathematics computer facilities, the mathematics faculty offices, and the MLRC described above be included in the renovated and renamed Mathematics and Computer Science Building.

G. Marketing and Outreach Need

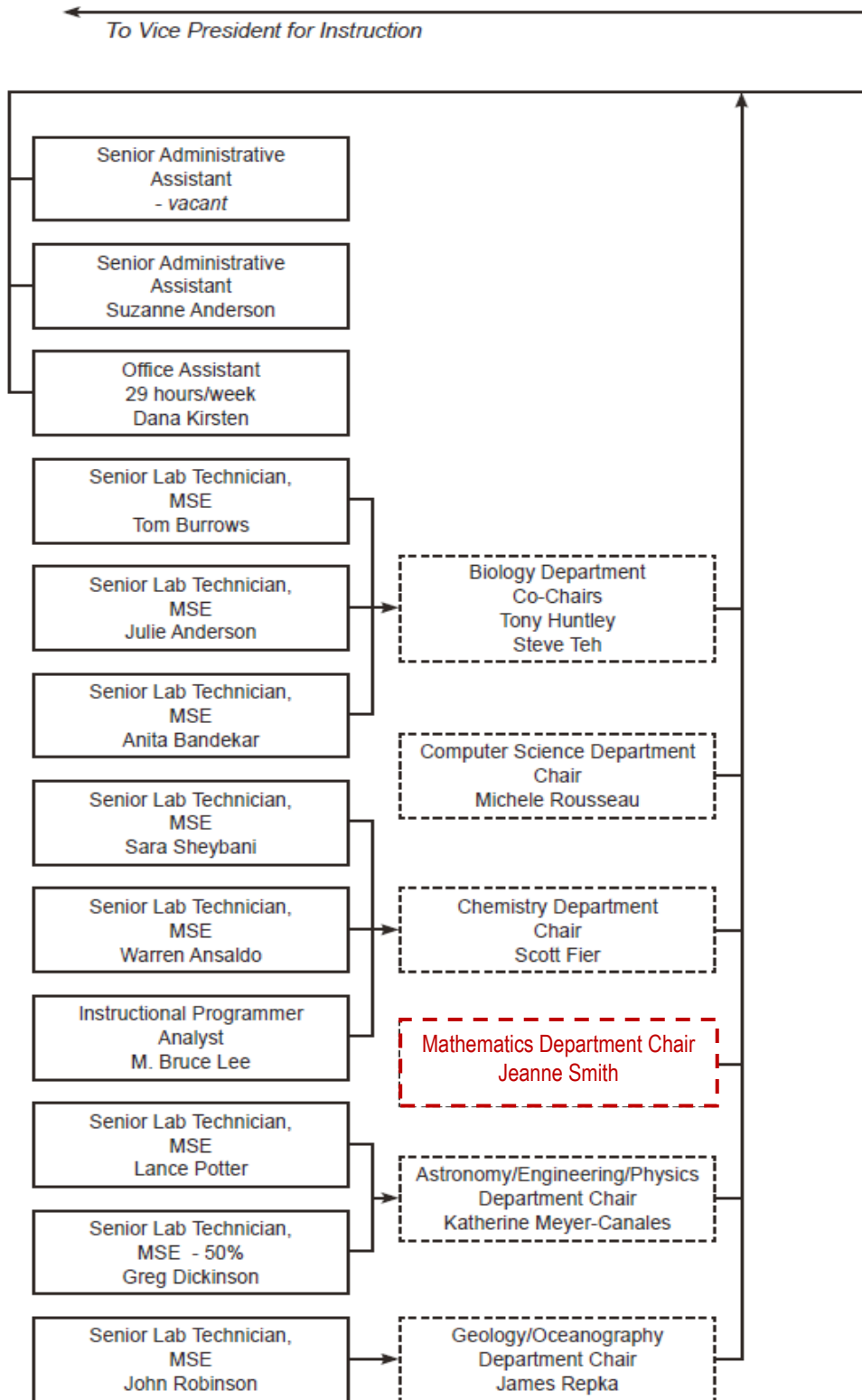
Mathematics Department faculty members collectively participate in college wide events designed as outreach opportunities to the local community. Senior Day, High School, Family Night, and the yearly President's Breakfast for local secondary curricula administrators are among the many events in which the Mathematics Department faculty has actively participated in the past. Most recently, members of the Mathematics Department faculty have participated in off campus community events in which they promoted the use of the free Algebra2go[®] online resources by local secondary schools and by local communities to help residents that might be described as having a low socioeconomic status. Additionally, the Mathematics Department faculty members support many other educational entities in this manner. The Los Angeles Unified School District receives such support.

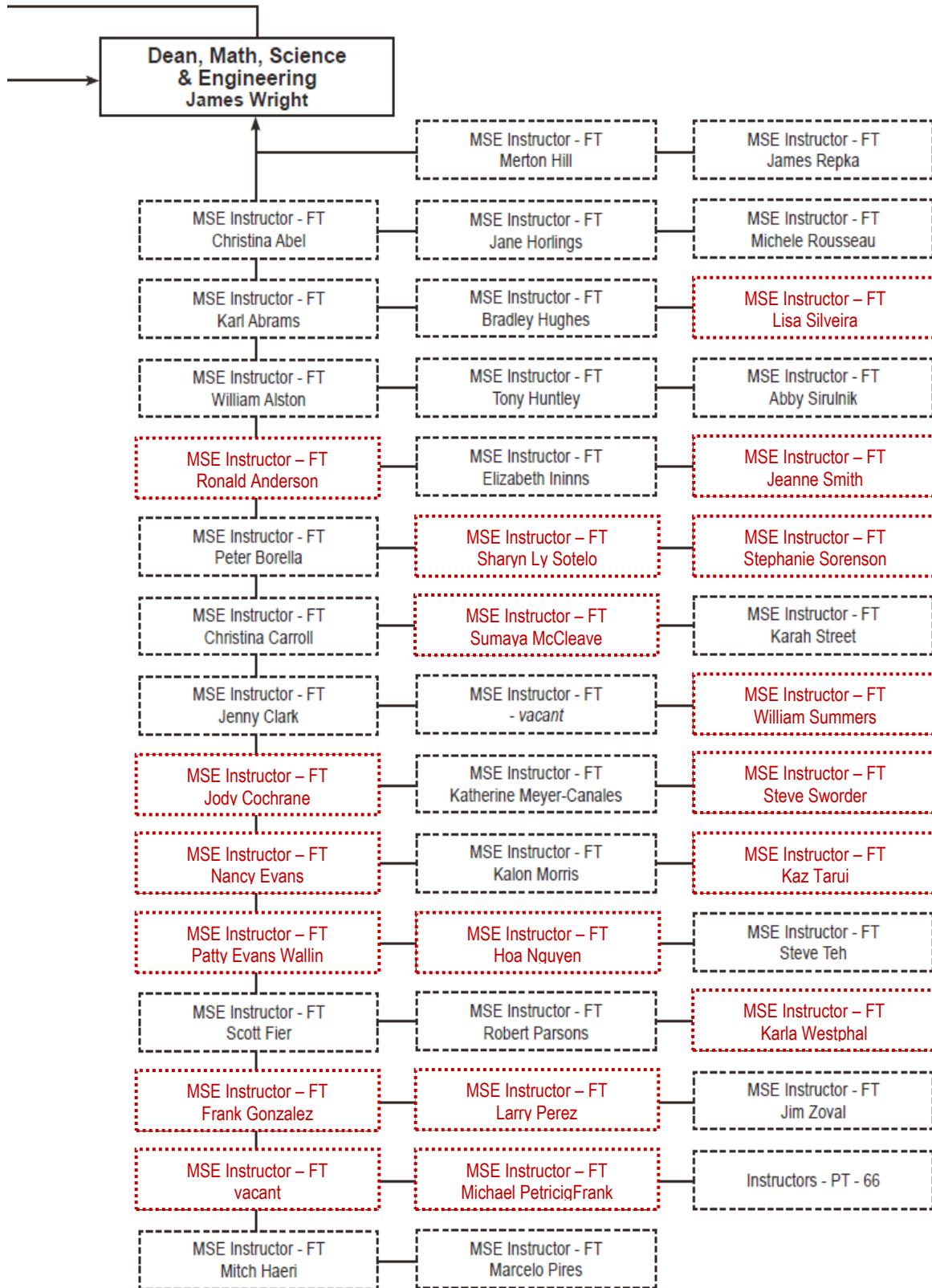
To the benefit of Saddleback College mathematics students, the Mathematics Department faculty includes many local high school mathematics teachers who supplement their regular income by teaching Saddleback College Mathematics Program courses. There is a strong sense of camaraderie amongst all of the members of the Mathematics Department and a free exchange of ideas, concerns, and information related to educational issues is encouraged. Examples of common topics of discussion are pedagogical techniques, assessment measurement tools, and changes in the use of technology in the classroom. This mutual exchange of information allows the local high school faculties to better prepare their students for success at Saddleback College. Conversely, this exchange of information allows the Mathematics Department to insure that the Mathematics Program as a whole is prepared to meet needs of the student population that enrolls in mathematics courses at Saddleback College soon after leaving any of the local high schools.

The Mathematics Department also coordinates the selection and presentation of two separate mathematics scholarships. One scholarship is available to students who are enrolled in the more advanced mathematics course sequence or who have completed those courses at Saddleback College. Scholarship awards of up to \$1,500 are available to eligible Saddleback College students for use after they transfer to a four-year college or university. The second scholarship is reserved for students who will enroll in one of the developmental mathematics courses in the semester following award of the scholarship. In 2009, Mathematics Department faculty member Professor Perez, team leader of the Algebra2go[®] project, donated \$10,000 to the Saddleback College Foundation to complement the Bernard Osher Endowment which helps financially strained students pay for their college education. Coupled with a match from the Saddleback College President's Foundation, the promised match from the Bernard Osher Endowment established a \$40,000 scholarship fund for the benefit of developmental mathematics students. The Algebra2go[®] Scholarship was awarded for the first time in 2010. A returning developmental mathematics student received a \$1,000 scholarship to help with the expenses for the student's next semester of study at Saddleback College.

Section IV: Appendices

A. Mathematics, Science, and Engineering Organizational Chart





B. Five-Year Program Staffing Profile

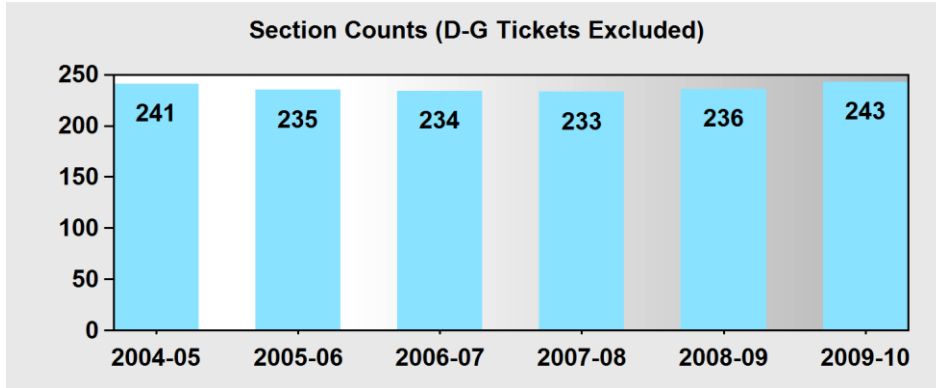
Position	Staffing Levels for Each of the Previous Five Years						% Change from Year 1 to Year 5
	2004 - 05	2005 - 06	2006 - 07	2007 - 08	2008 - 09	2009 - 10	
Administration	*Please see comment below						
Bargaining Classified Staff FT	#Please see comment below						
Bargaining Classified Staff PT	0	0	0	0	0	0	N/A
Non-bargaining Classified Staff FT	0	0	0	0	0	0	N/A
Non-bargaining Classified Staff PT	0	0	0	0	0	0	N/A
Student Workers	0	0	0	0	0	0	N/A
Faculty FT	18	18	18	17	18	18	0%
Faculty PT	35	28	30	30	30	36	+2.86%

*Administration – The Division of Mathematics, Science, and Engineering has one Dean, Dr. James Wright, who oversees the Mathematics Department. The Mathematics Department has one Chair, Dr. Jeanne Smith.

#Bargaining Classified Staff – The Mathematics Department has no classified staff specifically assigned to the Department. The Division of Mathematics, Science, and Engineering has two Senior Administrative Assistants who assist all departments in the division, including the Mathematics Department.

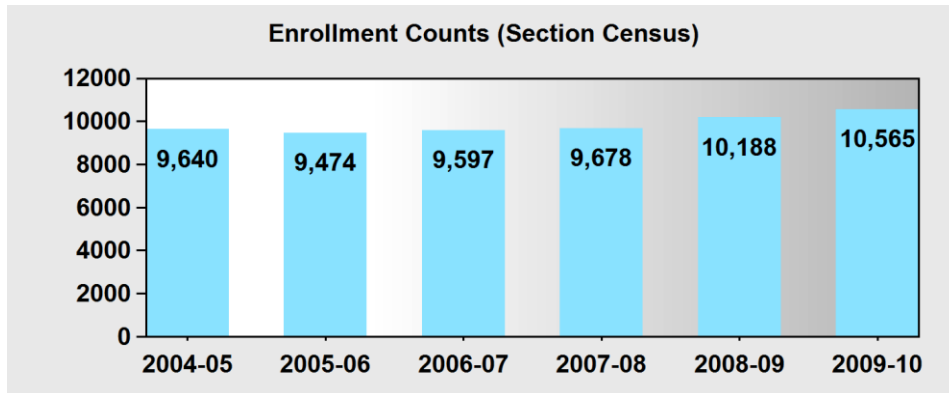
C. Program Review Data Sets

i. Section Counts



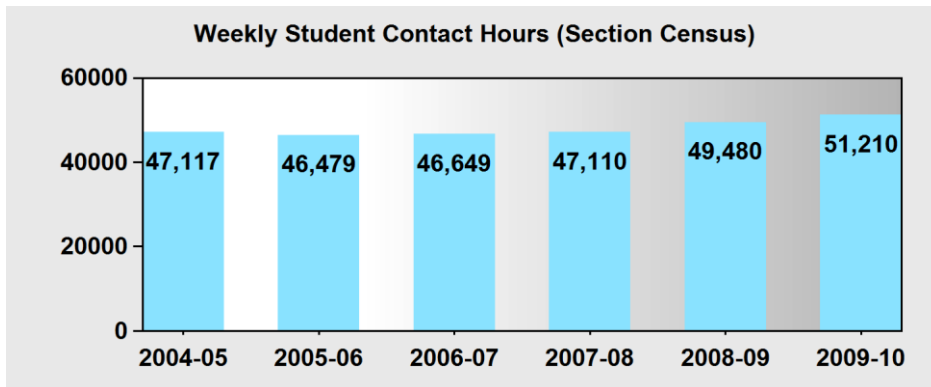
Course ID	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
MATH 2	10	10	10	10	10	10
MATH 3 A	10	10	10	10	10	11
MATH 3 B	6	6	6	6	6	6
MATH 3 C	2	2	2	2	2	2
MATH 7	14	14	14	14	14	14
MATH 8	13	11	11	11	11	11
MATH 9	2	2	2	2	2	1
MATH 10	23	23	23	23	23	23
MATH 11	6	5	5	5	5	5
MATH 24	1	1	1	1	1	1
MATH 26	1	1	1	1	2	1
MATH 124	11	11	11	11	11	11
MATH 205						1
MATH 251	57	56	55	55	54	56
MATH 251 A					1	1
MATH 251 B					1	1
MATH 253	54	52	47	49	52	56
MATH 255			5	2		
MATH 351	30	30	30	30	30	31
MATH 924	1	1	1	1	1	1
Total Sections	241	235	234	233	236	243

ii. Enrollment Counts at Section Census



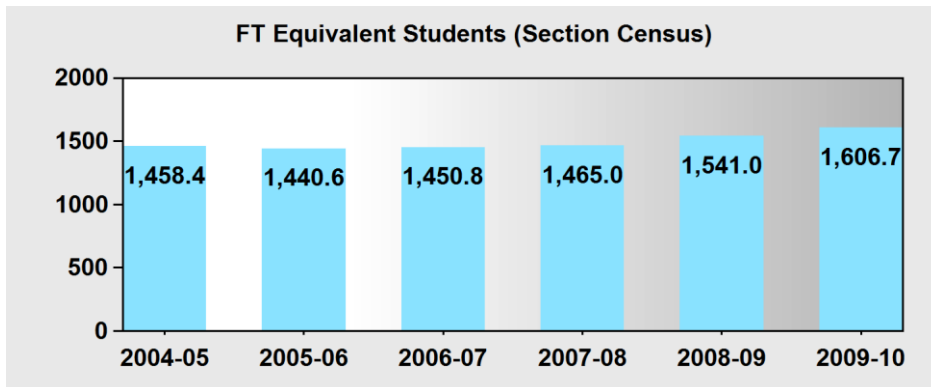
Course ID	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
MATH 2	358	362	379	381	435	457
MATH 3 A	436	438	450	443	423	508
MATH 3 B	232	261	255	253	236	281
MATH 3 C	92	70	80	84	100	90
MATH 7	584	562	587	598	559	568
MATH 8	466	469	484	410	478	451
MATH 9	55	56	76	52	59	29
MATH 10	995	1,014	909	975	1,021	1,037
MATH 11	244	224	230	225	227	240
MATH 24	31	24	23	17	27	39
MATH 26	36	25	26	25	38	38
MATH 124	457	445	446	468	500	498
MATH 205						14
MATH 251	2,326	2,287	2,353	2,316	2,403	2,473
MATH 251 A					43	48
MATH 251 B					14	21
MATH 253	2,098	2,069	1,934	2,102	2,310	2,488
MATH 255			132	67		
MATH 351	1,199	1,144	1,210	1,245	1,288	1,246
MATH 924	31	24	23	17	27	39
Total Enrollments	9,640	9,474	9,597	9,678	10,188	10,565

iii. Weekly Student Contact Hours (WSCH)



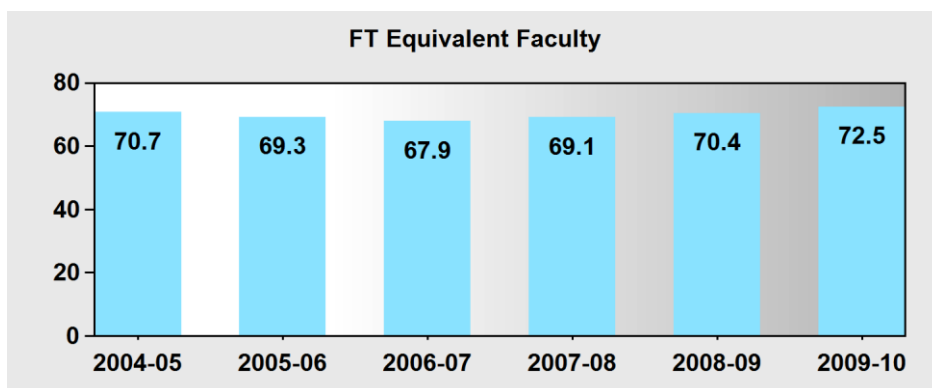
Course ID	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
MATH 2	1,790	1,810	1,895	1,905	2,175	2,285
MATH 3 A	3,488	3,504	3,600	3,544	3,384	3,935
MATH 3 B	1,160	1,305	1,275	1,265	1,180	1,405
MATH 3 C	460	350	400	420	500	450
MATH 7	2,920	2,810	2,935	2,990	2,795	2,840
MATH 8	2,330	2,345	2,420	2,050	2,390	2,255
MATH 9	330	336	456	312	354	174
MATH 10	5,970	6,084	5,454	5,850	6,126	5,955
MATH 11	1,220	1,120	1,150	1,125	1,135	1,200
MATH 24	124	96	92	68	108	156
MATH 26	144	100	104	100	152	152
MATH 124	1,371	1,335	1,338	1,404	1,500	1,494
MATH 205						42
MATH 251	11,630	11,435	11,765	11,580	12,015	12,365
MATH 251 A					129	144
MATH 251 B					42	63
MATH 253	10,490	10,345	9,670	10,510	11,550	12,440
MATH 255			396	201		
MATH 351	3,597	3,432	3,630	3,735	3,864	3,738
MATH 924	93	72	69	51	81	117
Total WSCH	47,117	46,479	46,649	47,110	49,480	51,210

iv. Full Time Equivalent Students (FTES)



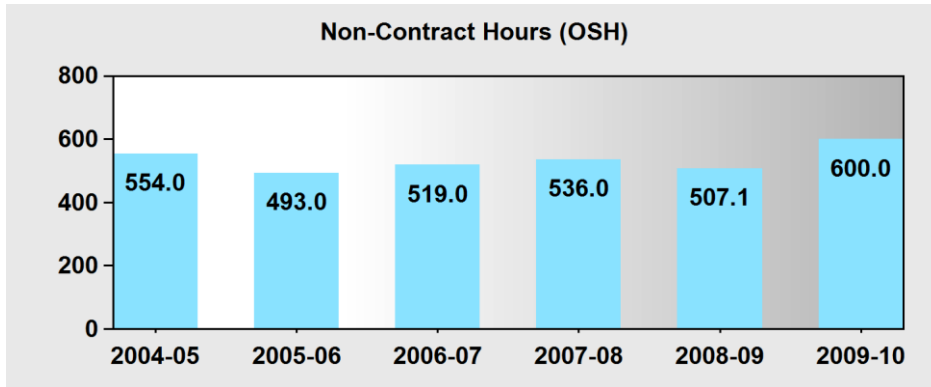
Course ID	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
MATH 2	61.8	62.3	65	65.2	74.5	78.1
MATH 3 A	74.9	75	76.9	76.1	72.4	86.7
MATH 3 B	39.9	44.6	43.4	42.9	40.3	47.8
MATH 3 C	15.6	11.9	13.6	14.3	17	15.3
MATH 7	100.5	96.5	100.4	102.2	95.6	97
MATH 8	80.3	80.4	82.7	70.1	81.6	77.4
MATH 9	5.5	5.6	8.1	5.5	6.3	3.1
MATH 10	103.4	104.8	93.7	102.3	106.2	107
MATH 11	41.9	38.2	39	38.2	38.5	40.7
MATH 24	4.3	3.6	3.5	2.6	4.1	5.9
MATH 26	5	3.8	3.9	3.8	5.7	6.1
MATH 124	47.5	46.2	45.9	48.1	51.2	51.3
MATH 205						1.5
MATH 251	396.2	393.1	404	397.4	412.5	424.4
MATH 251 A					4.6	4.8
MATH 251 B					1.5	2.1
MATH 253	356.7	355.3	331.6	360.4	395.9	426.5
MATH 255			13.7	6.7		
MATH 351	123.2	117.9	123.9	128.1	131.7	127.4
MATH 924	1.5	1.6	1.6	1.2	1.5	3.7
Total FTES	1,458.4	1,440.6	1,450.8	1,465.0	1,541.0	1,606.7

v. Full Time Equivalent Faculty (FTEF)



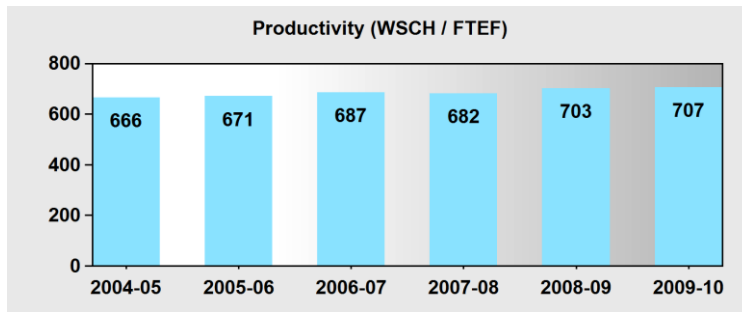
Course ID	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
MATH 2	3.3	3.3	3.3	3.3	3.3	3.3
MATH 3 A	3.3	3.4	3.3	3.7	3.75	4.13
MATH 3 B	1.98	1.98	1.98	1.98	1.98	1.98
MATH 3 C	.66	.66	.66	.66	.66	.66
MATH 7	4.62	4.62	4.62	4.62	4.62	4.62
MATH 8	4.29	3.63	3.63	3.63	3.63	3.63
MATH 9	.4	.4	.4	.5	.5	.2
MATH 10	4.75	5.15	4.9	5.5	5.7	5.7
MATH 11	1.98	1.65	1.65	1.65	1.65	1.65
MATH 24	.27	.27	.27	.27	.33	.27
MATH 26	.27	.27	.27	.27	.27	.27
MATH 124	2.2	2.2	2.2	2.2	2.24	2.2
MATH 205						.2
MATH 251	18.81	18.48	18.15	18.15	17.99	18.48
MATH 251 A					.2	.2
MATH 251 B					.25	.2
MATH 253	17.82	17.16	15.51	16.17	17.16	18.48
MATH 255			1	.4		
MATH 351	6	6	6	6	6.04	6.2
MATH 924	.1	.1	.1	.1	.12	.1
Total FTEF	70.75	69.27	67.94	69.10	70.39	72.47

vi. Non-Contract Hours (OSH)



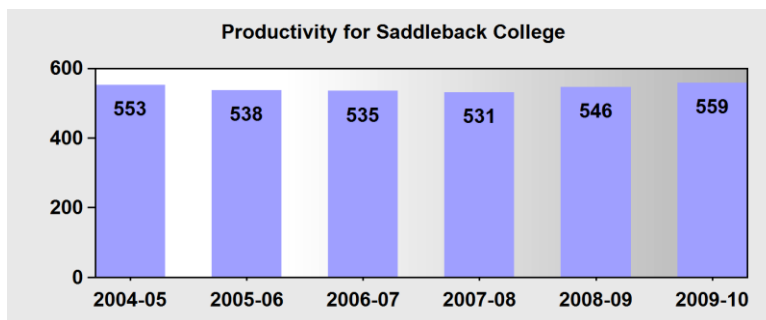
Course ID	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
MATH 2	10	10	5	5	5	5
MATH 3 A	5	5	5	5	5	5
MATH 3 B	5	5	5	5	5	5
MATH 3 C						
MATH 7	30	30	30	35	30	45
MATH 8	25	15	30	25	20	30
MATH 9	6	6				
MATH 10	45	45	51	51	51	60
MATH 11	20	5	5	15	10	10
MATH 24	4	4	4	4	5	4
MATH 26	4				4	4
MATH 124	27	27	30	24	19	24
MATH 205						3
MATH 251	150	130	160	170	148	165
MATH 251 A						3
MATH 251 B					1	3
MATH 253	145	130	110	125	135	165
MATH 255			3	3		
MATH 351	75	78	78	66	67	66
MATH 924	3	3	3	3	4	3
Total OSH	554	493	519	536	507	600

vii. Productivity for Mathematics (WSCH/FTEF)

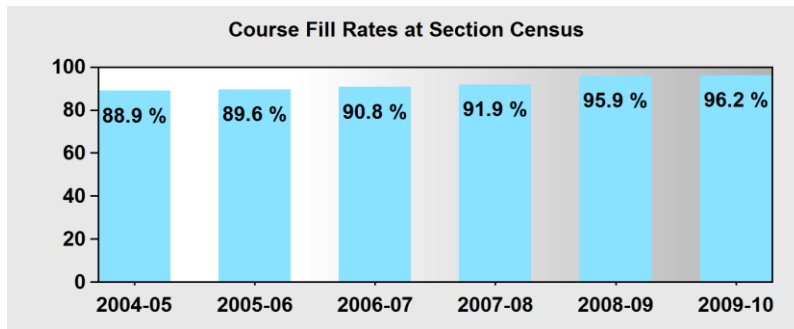


Course ID	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
MATH 2	542	548	574	577	659	692
MATH 3 A	1,057	1,031	1,091	958	902	953
MATH 3 B	586	659	644	639	596	710
MATH 3 C	697	530	606	636	758	682
MATH 7	632	608	635	647	605	615
MATH 8	543	646	667	565	658	621
MATH 9	825	840	1,140	624	708	870
MATH 10	1,257	1,181	1,113	1,064	1,075	1,045
MATH 11	616	679	697	682	688	727
MATH 24	459	356	341	252	327	578
MATH 26	533	370	385	370	563	563
MATH 124	623	607	608	638	670	679
MATH 205						210
MATH 251	618	619	648	638	668	669
MATH 251 A					645	720
MATH 251 B					168	315
MATH 253	589	603	623	650	673	673
MATH 255			396	503		
MATH 351	600	572	605	623	640	603
MATH 924	930	720	690	510	675	1,170
Productivity	666	671	687	682	703	707

viii. Productivity for Saddleback College

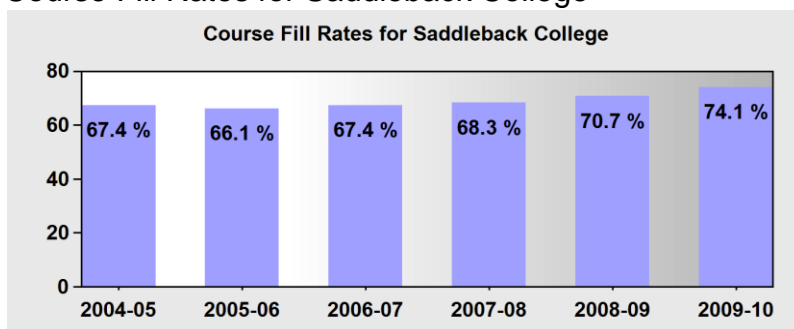


ix. Course Fill Rates for Mathematics

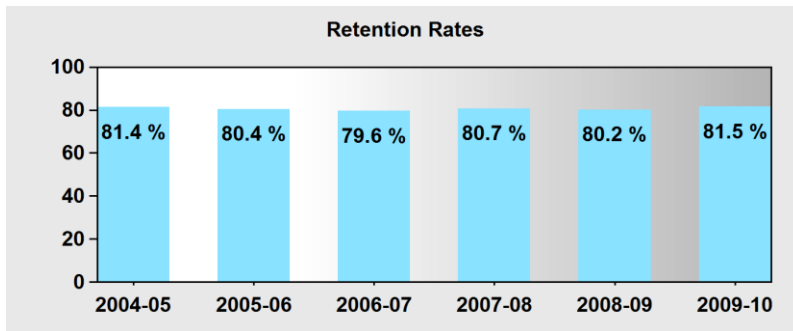


Course ID	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
MATH 2	79.6	80.4	84.2	84.7	96.7	101.6
MATH 3 A	96.9	97.3	90.9	89.5	94	102.6
MATH 3 B	85.9	96.7	94.4	93.7	87.4	89.2
MATH 3 C	102.2	77.8	88.9	93.3	111.1	100
MATH 7	92.7	89.2	93.2	94.9	88.7	90.2
MATH 8	79.7	94.7	97.8	82.8	96.6	91.1
MATH 9	61.1	62.2	84.4	57.8	65.6	64.4
MATH 10	96.1	98	87.8	94.2	98.6	100.2
MATH 11	90.4	99.6	102.2	100	100.9	106.7
MATH 24	68.9	53.3	51.1	37.8	60	86.7
MATH 26	80	55.6	57.8	55.6	42.2	84.4
MATH 124	92.3	89.9	90.1	94.5	101	100.6
MATH 205						31.1
MATH 251	90.7	90.8	95.1	93.6	98.9	98.1
MATH 251 A					95.6	106.7
MATH 251 B					31.1	46.7
MATH 253	86.3	88.4	91.4	95.3	98.7	98.7
MATH 255			58.7	74.4		
MATH 351	88.8	84.7	89.6	92.2	95.4	89.3
MATH 924	68.9	53.3	51.1	37.8	60	86.7
Course Fill Rates	88.9	89.6	90.8	91.9	95.9	96.2

x. Course Fill Rates for Saddleback College

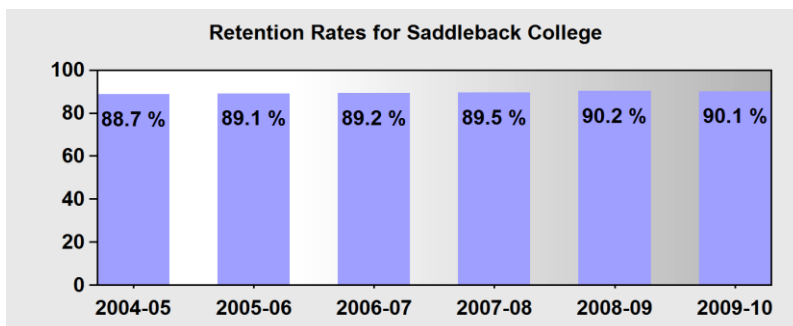


xi. Retention Rates for Mathematics

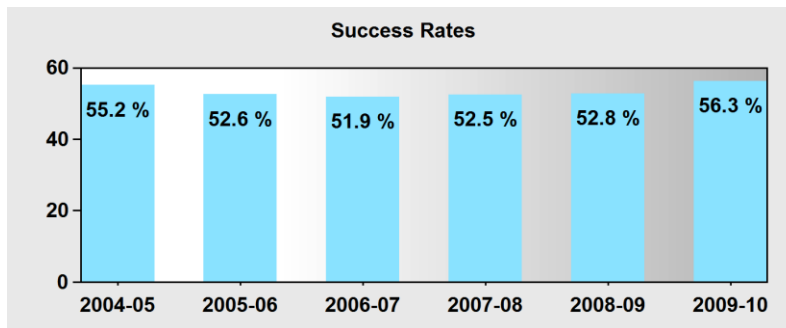


Course ID	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
MATH 2	80.6	83	73.7	78.1	85.4	82.6
MATH 3 A	76.3	81.7	79.9	73.7	70.5	76.5
MATH 3 B	84.1	82.4	78.9	75.6	78.2	81.7
MATH 3 C	88.2	92.4	89.6	88.2	83.7	87.3
MATH 7	84.2	81.6	81	78.7	78	82
MATH 8	83.4	79.3	78.5	81	80	78.7
MATH 9	91.3	71.2	81.5	77.6	73.1	76
MATH 10	81.5	86.4	83.1	82.9	81.8	81.8
MATH 11	76.3	75	80.8	82.6	68.1	74.8
MATH 24	87.1	95.7	100	100	96	97.4
MATH 26	80.6	80	92	90.9	76.5	81.3
MATH 124	81.5	79.9	77.3	78.1	77.7	79.9
MATH 205						83.3
MATH 251	78.9	76	77.1	80.1	80.1	79.5
MATH 251 A					80	80.4
MATH 251 B					69.2	94.7
MATH 253	81.3	79.1	80.6	80.5	80.3	83.2
MATH 255			74.6	78.9		
MATH 351	85	84.6	81	85	84.6	84.7
MATH 924	87.1	95.7	100	100	96	97.4
Retention Rate	81.4	80.4	79.6	80.7	80.2	81.5

xii. Retention Rates for Saddleback College

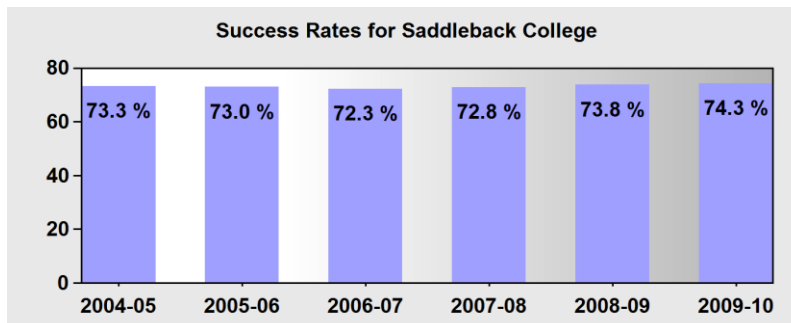


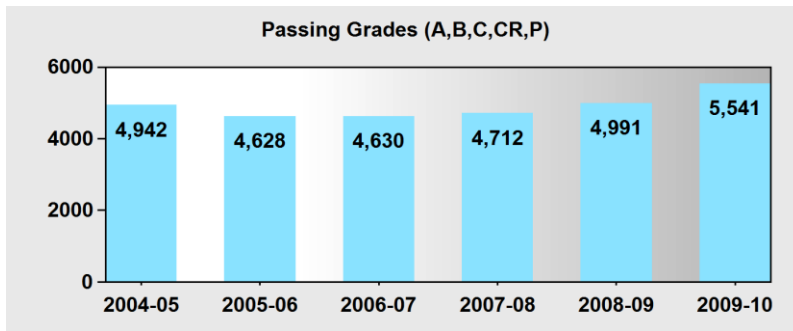
xiii. Success Rates for Mathematics



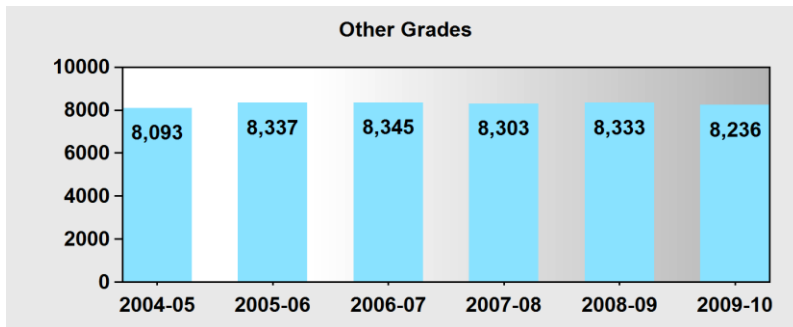
Course ID	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
MATH 2	60.9	57.3	55.7	53.4	61.6	65.0
MATH 3 A	55.8	58.9	58.4	48.9	53.1	54.4
MATH 3 B	58.4	57.0	57.4	56.9	53.0	62.2
MATH 3 C	81.2	75.8	72.7	66.2	61.6	67.1
MATH 7	66.2	60.5	61.8	50.2	52.5	61.0
MATH 8	62.2	54.6	56.4	53.9	57.9	56.3
MATH 9	58.7	48.1	70.8	59.2	53.8	76.0
MATH 10	62.8	65.0	62.1	62.8	65.7	64.7
MATH 11	61.9	63.0	63.0	59.9	52.0	53.7
MATH 24	67.7	91.3	87.0	93.8	92.0	89.5
MATH 26	55.6	80.0	84.0	81.8	70.6	68.8
MATH 124	54.6	53.3	47.2	49.5	49.6	55.7
MATH 205	0.0	0.0	0.0	0.0	0.0	66.7
MATH 251	44.4	40.7	41.7	44.8	45.5	46.9
MATH 251 A	0.0	0.0	0.0	0.0	42.5	37.0
MATH 251 B	0.0	0.0	0.0	0.0	38.5	78.9
MATH 253	54.0	52.1	51.0	53.9	50.9	56.8
MATH 255	0.0	0.0	45.6	42.1	0.0	0.0
MATH 351	56.7	51.3	49.6	54.7	54.3	58.4
MATH 924	74.2	91.3	95.7	93.8	92.0	97.4
Success Rate	55.2	52.6	51.9	52.5	52.8	56.3

xiv. Success Rates for Saddleback College



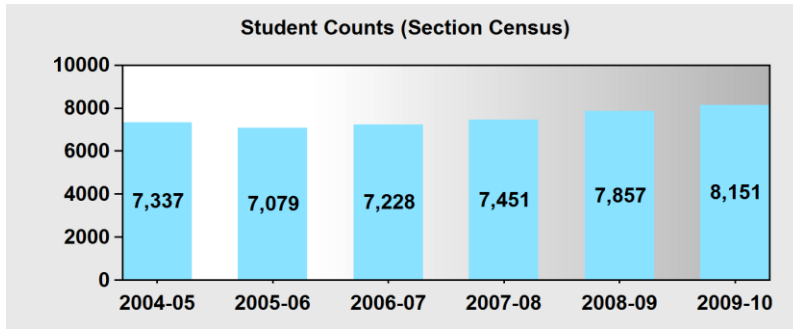
xv. Passing Grades

Passing Grades	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
A	1,174	1,197	1,172	1,219	1,353	1,497
B	1,613	1,486	1,535	1,597	1,561	1,754
C	1,973	1,801	1,770	1,710	1,816	1,981
CR	182	144	153	186	261	
P						309
Total	4,942	4,628	4,630	4,712	4,991	5,541

xvi. Other Grades

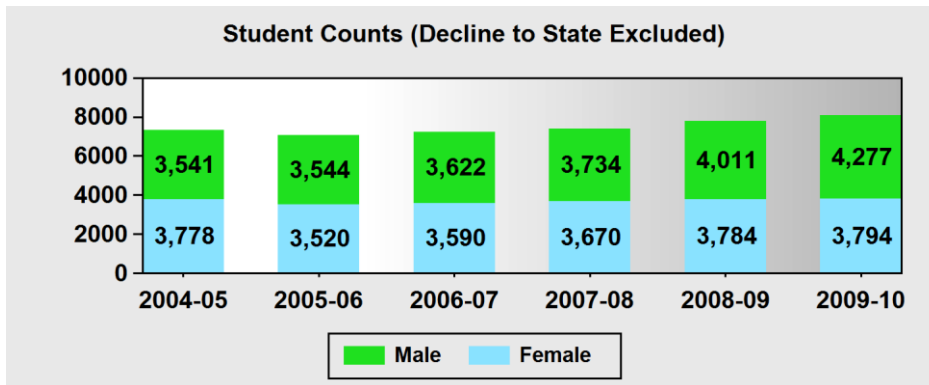
Other Grades	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Not Avail	1					
D	828	896	904	882	941	918
DR	4,079	4,171	4,059	4,043	3,875	3,941
F	1,426	1,430	1,453	1,516	1,424	1,355
IF		1				
IX						1
MW						1
NC	89	117	111	130	226	
NP						204
W	1,670	1,722	1,818	1,732	1,867	1,816
Total	8,093	8,337	8,345	8,303	8,333	8,236

xvii. Student Counts by Age Group



Age Group	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1. Below 18	325	316	340	372	304	301
2. 18-21	4,682	4,621	4,858	4,968	5,216	5,381
3. 22-29	1,521	1,448	1,428	1,489	1,628	1,695
4. 30-39	426	370	337	320	372	434
5. 40-49	263	236	195	222	227	225
6. 50-59	99	77	61	74	101	101
7. Over 59	21	8	8	6	9	14
Undefined		3	1			
Total Students	7,337	7,079	7,228	7,451	7,857	8,151

xviii. Student Counts by Gender



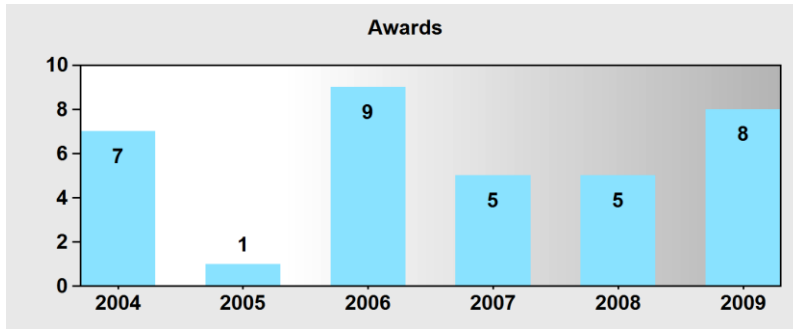
xix. Student Counts by Ethnicity

Ethnicity	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
White, Non-Hispanic	4,295	3,941	4,033	4,281	4,243	4,434
Decline to state	699	917	922	638	1,074	1,015
Mexican, Chicano, Mexican-American	648	601	673	749	780	854
Mixed Ethnicity	169	190	234	224	204	434
Other Hispanic	192	154	175	230	231	193
Filipino	49	157	146	149	168	187
Black, African-American	52	160	121	145	157	150
South American	37	128	131	138	137	132
Middle Eastern	171	144	124	96	78	43
Other Non-White	94	70	67	122	137	110
Other Asian	92	84	65	97	110	116
Japanese	88	97	101	118	93	63
Vietnamese	91	98	99	96	88	63
Chinese	85	79	59	82	84	94
Korean	70	78	83	86	73	67
Central American	70	57	58	48	54	57
American Indian, Alaskan Native	35	41	48	48	53	40
Indian Sub-Continent	43	40	42	39	34	40
Other Pacific Islander	22	16	16	21	20	14
Pacific Islander; Hawaiian	14	12	12	22	18	20
Pacific Islander;	6	6	4	10	6	5
Cambodian	7	6	4	4	7	6
Pacific Islander; Guamanian	5	1	6	5	3	6
Laotian	3	1	5	3	5	8
Total Students	7,337	7,079	7,228	7,451	7,857	8,151

xx. Student Counts by Educational Goal

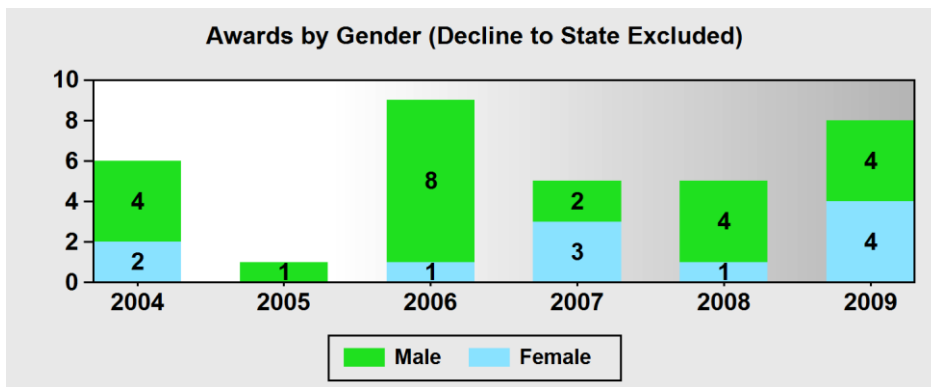
Educational Goal	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Obtain a Bachelor's degree after Assoc.	3,035	2,967	3,308	3,631	3,898	4,121
Obtain a Bachelor's degree w/o Assoc.	1,012	977	1,049	1,069	1,141	1,260
Undecided on goal	908	867	871	961	1,071	947
Obtain a voc certificate and transfer	1,042	1,026	875	844	677	485
Prepare for a new career	487	434	328	277	255	239
Discover/develop career interests	250	222	203	157	140	138
Obtain two-year voc. degree w/o transfer	159	184	131	129	115	108
Personal Development	127	112	112	72	89	97
Advance in current job/career	99	95	86	92	107	74
4 yr col std taking crs to meet 4 yr requirements				1	125	398
Obtain a non-voc degree w/o transfer	56	49	73	69	92	123
Improve basic skills	48	39	54	45	56	49
Complete credits for HS diploma or GED	35	42	53	50	46	57
Obtain a voc certificate w/o transfer	50	45	41	38	35	36
Maintain license	28	19	24	16	8	16
	1	1	20			
To move fr NCR coursework to CR coursework					2	3
Total Students	7,337	7,079	7,228	7,451	7,857	8,151

xxi. Awards by Age Group and Type



Awards by Age Group	2004	2005	2006	2007	2008	2009
18-21	4	1	3	4	3	6
22-29	2		3	1	1	2
30-39			3		1	
Undefined	1					
Total Awards	7	1	9	5	5	8
Awards by Major	2004	2005	2006	2007	2008	2009
MATHEMATICS	7	1	9	5	5	8
Total Awards	7	1	9	5	5	8
Award Type	2004	2005	2006	2007	2008	2009
Associate in Arts	7	1	9	5	5	8
Total Awards	7	1	9	5	5	8

xxii. Awards by Gender



xxiii. Staffing Counts

Employee Type		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
PART-TIME	Alemansour, Steve	1	1	1	1	1	1
	Bell, Gary	1	1				
	Berman, Robin	1	1	1	1	1	1
	Berta, Melissa	1					
	Bunch, Henry			1	1	1	1
	Callard, John	1	1				
	Chen, Sierra	1	1				
	Chung, Phoebe			1	1	1	1
	Cioczek-Georges, Renata						1
	Clark, Leonard	1	1	1	1	1	1
	Cowieson, William					1	
	Cozean, Kim	1	1	1	1	1	1
	Dunham, John						1
	Dye, Paul	1	1	1	1	1	1
	Fossum, Nolan		1				1
	Go, Jane	1	1	1	1	1	1
	Gonzalez, Carly						1
	Harding, Christine	1	1	1	1	1	1
	Helmick, Keith	1	1	1	1	1	1
	Heneks, Kasara						1
	Ichinose, Cherie	1	1				
	Igolnikov, Mark	1					
	Jackson, Chuq	1	1	1	1	1	1
	Jay, Robert	1	1	1	1	1	1
	Katouli, Allen				1	1	1
	Khou, Meng	1					
	Klaus, Raymond	1	1	1	1	1	1
	Koines, Andrew						1
	Lam, Jenny					1	
	Lebowitz, Jerry	1	1	1	1	1	1
	Lief, Sherrill	1	1	1	1	1	1
	Lindsey, Daniel			1	1		
	Littig, Adam						1
Liu, Robert	1						
Manchanda, Yash	1						
Marino, David	1						
Marzolo, Gary	1	1	1	1	1	1	

Employee Type (continued)	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Meloney, Kate			1	1	1	1
Mihele, Camille						1
Muldrow, Kyle				1	1	1
Ninh, Joseph			1	1	1	
Ortiz-Franco, Luis	1					
Purdy, Brendan			1	1		
Quigley, James	1	1	1	1	1	1
Sam, Thinh	1	1	1	1	1	1
Samiian, Mahvash	1	1	1	1	1	1
Sanders, Michael	1	1	1			
Schubert, Patricia	1	1	1	1	1	1
Shafe, Kia	1		1	1	1	1
Solarczyk Patrick, Rachel						1
Stagg, Kristen			1			
Threadgill, Ethan	1	1				
Tress, Marguerite	1	1	1	1	1	1
Vanguilder, Michael		1	1	1	1	1
Voicu, Mariana		1	1	1	1	1
Wehan, Jim	1					
Yang, Catalina	1					
Total	35	28	30	30	30	36
Total	35	28	30	30	30	36