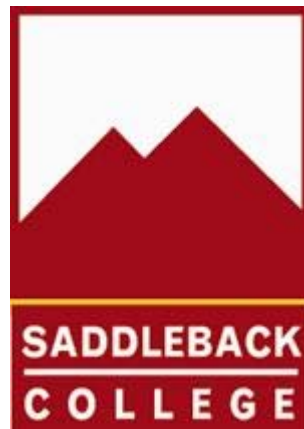


**Saddleback College  
Program Review for Automotive  
Technology**



**Submitted on September 17, 2007**

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## **Program Review Team Members and Approvals**

Program Review Team Chair:

**Clifford Meyer, Department Chair**

Program Review Team Members:

**Rene Cinar**

**Danyel Clark**

**Darrell Deeter**

**Bob Demmon**

**Clifford Meyer**

**Don Taylor**

**Ken Welch**

**Brian Yarnall**

Approvals:

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Division Dean

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Program Review Chair

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Academic Senate President

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Vice President of Instruction

## Program Review Checklist

<b>Date Completed</b>	<b>Action</b>
Fall 06	Contact Program Review Chair for orientation
Fall 06	Form Program Review Team
Fall 06	Gather documents (Org Chart/Staffing Profile/SLO Assessment Forms/Data Sets)
Fall 06	Solicit input from faculty and students
Fall 06	Determine if additional research is needed
Fall 06	Contact College Research Analyst if necessary
Spring 07	Write Program Review report
Fall 07	Submit report to Dean and Program Review Chair for approval
TBD	Report submitted to Academic Senate for approval
TBD	Report submitted to Office of Instruction for approval
TBD	Report submitted to College President and the Office of Institutional Effectiveness
TBD	Report posted to the IE web site
TBD	Presentation to the Planning and Budget Committee

## **Section I: Program Overview**

### **A. The Mission of the Program and its Link to the College's Mission and Goals**

The mission of the Automotive Technology program is to provide industry-linked programs, education and services that enables all individuals to reach their career goals in order to achieve a quality lifestyle, become competitive in the global market place, and sustain California's economic future.

### **B. Historical Background and Unique Characteristics of the Program**

#### 1A History

The Automotive Technology program at Saddleback College was founded with the creation of the college in 1967. The first automotive courses offered were taught off campus at Mission Viejo High School in the evening. The department moved to Saddleback College's lower campus in 1983. In 1991, the Technology and Applied Science building was built. The automotive department then relocated to the north side of the TAS building encompassing approximately 48,000 square feet. This area includes 16 inside automotive lifts, 1 outside truck lift, and 1 ESP BAR97 Smog Inspection chassis dynamometer certified for BAR instruction, 2 Hunter alignment machines, a fully equipped engine rebuilding machine shop, vehicle chassis dynamometer, engine dynamometer, two classrooms, student library and two instructor's offices. This is just an overview of the industry specific equipment that the automotive department uses for instruction.

The Automotive Technology Program is a career/technical education program designed to provide entry level and service skills required of the automotive repair technician. Training is given in both theory and practical skills in the operation, maintenance, and repair of all types of automotive related systems. Automotive repair technicians diagnose, service, and repair gasoline powered and hybrid powered passenger cars and light duty trucks.

Students enter the program at the beginning of the fall, spring, or summer sessions and are responsible for the purchase of textbooks, personal safety equipment, and hand tools. Students may complete a certificate program within four major specialty areas. They may also choose the option to complete their certificate program while completing the requirements for their Associate in Science or Associate in Arts Degree or while preparing to transfer to a four-year college. Satisfactory completion of at least 18 units of automotive technology or related units and a minimum of 60 units including the general education requirements with an overall GPA of 2.0 qualifies the student for the Associate in

Arts degree. A minimum of 12 units must be completed at Saddleback College. The student may also elect to complete one or more of the following four certificate programs: General Automotive Technician, Automotive Engine Performance Specialist, Automotive Engine Service Specialist, Automotive Chassis Specialist.

## 1B Uniqueness

The automotive technology department is proud to have a program that is both a vocational one, training students to go from our program into the automotive industry workplace, or to upgrade their technical skills. The successful automotive student will transfer to a four-year college or university.

The foundations of this success are in the unique and broad-based equipment and facilities and in the talent and real-world experience of the faculty. Our part time faculties are all automotive and education professionals, most having many years of “hands on” industry experience. We also have instructors teaching high school level automotive technology full time while working in our department. Our unique staff brings real-world experience and knowledge of current trends, practices, and a professional work ethic to the department.

We have a student reference library located in the main automotive lab. In the library there are four Dell computer systems networked to support student learning. Here students may complete their assignments, perform required research on the internet or find specific information on one of the two automotive information systems we have networked to our computer system. We also have student computers located strategically throughout the automotive department facilities. These are in TAS123, TAS 124, and TAS 127 for the students to use. All of these computers are networked to our server, which provides the students with the same information systems that are required for automotive repair and maintenance. The two industry standard information systems are Mitchell-on-Demand and All-Data. These two software programs are used throughout the automotive industry to provide foreign and domestic vehicle information such as specifications, repair information, labor guide and wiring information. Over the past three years many unique changes have taken place in the automotive department. We have upgraded our shop equipment to meet current industry technology requirements to train our students. We are proud of 2 of these new additions. There is a Mustang MD-250 Chassis Dynamometer. This provides students with industry specific equipment for training using “live vehicles”. In 2007 a new engine test cell room was designed, funded and built. This equipment will allow our students that are specializing in the machining certification program to complete their engine project and measure the horsepower and torque using our industry specific equipment.

Our program recruits local students from over 25 Orange County high schools. These students range in knowledge from the student with little or no automotive experience to the employed technician seeking to update their skills in the latest automotive technology.

The Automotive Technology Program is certified by the California Bureau of Automotive Repair (BAR) to provide Basic and Advanced level automotive emission control systems training. The program is also certified to offer advanced classes related to the Enhanced Area California Smog Program. Students who successfully complete these certified courses become eligible to take the BAR licensing examination for Enhanced Area Emission Specialist (CA Smog License). Students who are employed as licensed smog technicians return to complete their bi-annual required update course(s) offered by the department. Many students also return to our program to update and upgrade their skills and knowledge to meet the rapid changing technology in the automotive industry.

### **C. Progress Since the Last Program Review**

This is the first program review for the automotive technology department.

### **D. Current Strengths, Opportunities, and Challenges**

We are the only South Orange County Community College offering a broad range of automotive technology courses. The closest college that has automotive technology is Golden West College in Huntington Beach. It is over 35 miles north west of our campus. Our program focuses not only on providing instruction in the most current automotive technology areas, but also focuses heavily on traditional “hands-on” skills based courses. It is our goal to produce students who not only have the necessary workplace skills, but also have gained traditional automotive theory, operation, diagnostic and personal skills.

Demands of the automotive industry job market make it of vital importance that we train our students in the most current automotive technology. Our industry advisory committee members meet with department members at least bi-annually to review our program. These committee members provide vital input on our classes, equipment and curriculum. The advisory committee members also provide a great resource for our Cooperative Work Experience (CWE) student program. Students are able to attend school and work at a local industry partner’s facility that provides the on the job learning experience. There are also opportunities for students to obtain scholarships, attend guest speaker lectures and attend off campus field trips.

Maintaining the most current facilities is a constant challenge, both in terms of the rapid changes in the automotive industry and division budget constraints. We are

in the process of upgrading our department computers. These are the computers that students use throughout the automotive department. At this time our two classrooms are equipped with permanent LCD projectors, DVD/VHS player, Smart board flat screen monitor and Dell computer. This state of the art presentation equipment provides the instructor with the technology to present the latest in media technology. We also have one 3D optical ELMO projector that is shared between the two classrooms. This provides the students with "live" 3D projections of components to visually explain a concept.

Both the full-time, part-time instructors and the staff members have automotive industry backgrounds and keep updating their skills and knowledge by attending industry conferences, classes or working in the automotive field at some level. Our instructors can share the most updated information with students in our classes, while stressing the importance of traditional values such as work ethics, communication skills and professionalism. Our instructors are ASE certified in at least one area of specialization. The two full time instructors are master certified ASE automotive technicians and hold advanced ASE L1 certification.

Automotive Technology students can participate in various internship opportunities through our network of industry partners in Orange County. One of our current goals is to grow our Cooperative Work Experience program through cooperation with our advisory members and industry partnerships. Campus and community outreach is also stressed to our students. These programs provide real-world experience and excellent work related skills for our students.

Department of Labor Bureau of Labor Statistics (<http://www.bls.gov/oco/ocos181.htm#outlook>) states, "Employment of automotive service technicians is expected to grow as fast as the average for all occupations through the year 2014. Over the 2004-14 periods, demand for technicians will grow as the number of vehicles in operation increases, reflecting continued growth in the number of multi-car families. Additional job openings will be due to the need to replace a growing number of retiring technicians (21,400 retiring by 2014), who tend to be the most experienced workers."

Current California statistics show that over 10,000 technicians are needed immediately to meet the growing demand. It is estimated by 2014 that number will grow according to Julie Bradshaw, California Secretary of Labor to more than 48,900. This includes the current estimated number of technicians that will retire and the estimated number of technicians needed to meet industry workplace demands. Employment growth will continue to be concentrated in automotive dealerships and independent automotive repair shops. Many new jobs also will be created as technology changes. Hybrid and alternative fuel vehicles will demand a more highly trained workforce. Information like this should act as a draw, attracting students to our program, and the college as a whole.

## Current Challenges:

One critical need at this time is to have our program certified by the National Automotive Technical Education Foundation (NATEF). This is the benchmark certification that the automotive industry uses throughout the United States. This certification provides industry with the proof that the department meets or exceeds the rubric NATEF requires. At the current time automotive manufactures require a school to be NATEF certified to receive direct support. This support could be donated equipment, equipment funding, training materials, and of course new vehicles. The various automobile manufacturers and their participating dealers sponsor 2-year associate degree programs at postsecondary schools across the nation. ASE (NATEF) certification is a nationally recognized standard for programs offered by high schools, postsecondary trade schools, technical institutes, and community colleges that train automobile service technicians. Some automotive manufactures provide NATEF-certified instruction programs with service equipment and current-model cars and trucks on which students can practice new skills and learn the latest automotive technology. While NATEF certification is voluntary, it does signify that the program meets uniform standards for instructional facilities, equipment, staff credentials and curriculum. To ensure that programs keep up with ever-changing technology, repair techniques, and ASE standards, the certified programs are subjected to periodic compliance reviews and mandatory recertification, as are the ASE standards themselves. As stated in the Occupational Outlook Handbook, in 2004 about 2000 high schools and postsecondary national automotive service technician programs had been certified by ASE/NATEF.

This certification process is estimated to take between 1 1/2 to 2 years to complete. The total number of hours is estimated to be 700-800 if completed by at least a two-person team. At this time the department is working on a program to review our current status and estimate the funding needed to become NATEF certified. College Administration will support this preliminary process, which will enable us to complete an accurate project analysis. This preliminary self-evaluation process is estimated to take between 160-200 hours. This estimate will also include a two-day review of our program by a NATEF certified team leader. The team leader report will document the necessary steps that need to be taken to have our program NATEF certified. This process is called a "program self evaluation". When this preliminary project is completed it will enable us to have a clear view of the requirements including the costs of becoming NATEF certified. We would then ask for our industry partners and school administration to become involved in completing the certification process.

## **Section II: Review Report**

### **A. Faculty and Staff**

#### Faculty and Staff

As of spring 2007, the automotive department consists of:

Two full-time faculty  
Six part-time instructors  
Two part-time lab technicians (50% and 55% respectively)  
One Dean (administrator)

All of our faculty and staff have significant professional backgrounds, which is one of the department's strengths. The part time faculty includes full time working professionals and retired educators. Our two lab technicians work a total of 42 hours per week. This is a major weakness in our program. Due to the lab component of our courses we need a lab technician present during all of our classes. Our classes are offered morning, afternoon and in the evening. We would ask for a full time lab technician and a part time lab technician. Converting the 55% part time lab technician into a full time position would create the full time lab position. The other existing part time lab technician would be kept at 50% working 20 hours per week. The staffing is a safety issue. We will be submitting a classified hiring request to Administration for additional support.

### **B. Curriculum and Instruction**

Our program offers courses in 21 different courses in automotive technology. These make up four certificate programs: Automotive Engine Performance Specialist, General Automotive Technician, Automotive Engine Service Specialist, and Automotive Chassis Specialist.

Automotive Engine Performance Specialist Certificate Program (engine performance and electrical): Associate degree, Certificate, Transfer (23.5) Unit Courses: Certificate requirements: Auto — 100, 101, 102, 103, 109, 205, and 207. SELECT 3 UNITS FROM THESE SPECIALTY COURSES: Auto 108, 189/289, 220, CWE 168/169.

General Automotive Technician Certificate Program (all automotive operating systems): Associate degree, Certificate, Transfer (35.5-39) Unit Courses: Auto — 100, 101, 102, 103, 104A, 104B, 106A, 106B and 207. SELECT ONE SPECIALTY COURSE .5-5 Units: Auto 107, 108, 109, 205, 220, CWE 168/169.

Automotive Engine Service Specialist Certificate Program (automotive machinist): Associate degree, Certificate, Transfer (19.5-23) Unit Courses: Auto — 100, 102, 103, 104A, and 104B. SELECT ONE SPECIALTY COURSE .5-5 Units: Auto 108, 109, 189/289, 204, 205, 207, 220, CWE 168/169.

Automotive Chassis Specialist Certificate Program (under-car emphasis): Associate degree, Certificate, Transfer (18.5-22) Unit Courses: Auto — 100, 105, 106A, 106B, 107, and 108. SELECT ONE SPECIALTY COURSE .5-5 Units: Auto 109, 189/289, 205, 207, 220, CWE 168/169.

Associate in Science Degree: completion of the certificate program and a minimum of 60 units including the general education requirements with an overall GPA of 2.0 qualify the student for the Associate in Science degree. A minimum of 12 units must be completed at Saddleback College.

Associate in Arts Degree: complete at least 18 units (or as described in the major area of study) in a single subject or related disciplines and a minimum of 60 units including the general education requirements with an overall GPA of 2.0 qualifies the student for the Associate in Arts degree. A minimum of 12 units must be completed at Saddleback College.

Over the past four years we have continued to evaluate and make necessary changes to update our curriculum. These changes are based on our industry surveys and advisory board meetings. As technology changes our advisory board members have suggested specific courses and course student learning outcomes. We have developed these courses to meet our industry partners needs.

### **C. Student Success**

In conjunction with this program review, department faculty is further developing Student Learning Outcomes (SLO) for each course of instruction. The data collected from the assessment of the SLO-based instruction will allow faculty to explore correlations and success rates for specific competency attainment, thus being able to better measure and document objective indicators of student success and competency. We currently use pre-tests and post-tests specific to each course, focusing on specific ASE type questions that cover NATEF rubric, concepts and vocabulary. Please see the attached student success and retention summary in the appendices pages 29-34.

Gender breakdown for all courses offerings over the past 6 years remained at a very low level for female non-traditional students. As indicated we have normally 2 female students each semester. We plan to start a new marketing plan to

attract female students into our program. Please see the attached student gender breakdown in the appendices page 34.

Ethnicity patterns over the 6-year period show that the diversity represented is, on average, comparable with the campus and surrounding community diversity, throughout all departmental course data (14% Hispanic, 19% Asian ancestry, 1% African American, 58% White, and 8% unknown). Please see the attached appendices page 36.

Average class size has remained nearly constant over the review period. Total census enrollment varies slightly and shows increases as more sections are offered.

Getting students ready for the workplace is an important goal for this department. Additionally, many students have indicated that they are taking classes to acquire and upgrade job skills and earn certificates. Referring to the summary chart below, our certificate rate has remained almost level during the past three years. This chart shows our success with achieving our goals: to train students to enter the workplace, and/or to upgrade their workplace skills, and/or to transfer to a four-year college or university.

**Academic Year/Term**

Benchmarks	2001	2002	2003	2004	2005	2006
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**Access And Productivity**

Number of Course Sections Offered		29	29	27	29	29	32*
C 1 Duplicated Headcount		632	730	661	731	702	738*
Average Enrollment per section		28	36	34	36	33	30*

**Success & Retention**

Average Course Term Retention	82% (College) 87%(Program)	85	79	89	91	89	89*
Average Successful Course Completion Rate	71% (College) 65% (Program)	63	55	68	70	70	64*
Number of Degrees & Certificates Awarded		n/a	n/a	n/a	19	22	19

**Student Characteristics**

Educational Goals	Transfer	13	9	4	4	9	2*
	Upgrade Skills	14	8	10	6	12	4*
	VOC Ed Certificate	11	12	7	8	9	5*
Out-of District Students	In District	55	46	36	34	43	38*
	Irvine	6	4	3	8	6	4*
	Out-of District	8	8	3	2	9	14*

\*Fall 2006 not included

Graduates from our program have also routinely stepped directly into careers as automotive technicians and other automotive related positions with Orange County companies like Hyundai Motor America, The Tuttle-Click Group, The Family Group, The Weslow Group, The Select Auto Group and Mercedes of Laguna Niguel. These are just a few of our new car dealership industry partners. Successes like these help raise the profile of our department and our college in both the public and academic arenas.

#### **D. Facilities, Technical Infrastructure, and Resources**

The Automotive Technology department has 2 instructional classrooms/lab rooms. ATAS Funding for instructional supplies and equipment comes from the departments instructional supply budgets. The ATAS Division, as well as the college equipment and technology committees, provides funds (in a competitive process) for purchase of major resources. VTEA funding has provided additional needed resources.

Technology utilized by the department includes 9 Dell computers, 1 department network computer, 1 scanner/printer/slide copier, 1 network printer, computer projection equipment, Smart flat screen monitors and an ELMO 3D projector. This equipment is used in both of our classrooms, student library and lab. There is multiple major software programs being utilized for instruction: Mitchell-on-Demand, Alldata, Prosis, ESP, Microsoft Explorer and Microsoft Office. At this time Saddleback Technology Committee funds our three major yearly software licenses (Mitchell, ESP and Alldata). Without this support we would be unable to meet industry standards due to the high cost of yearly subscriptions. This direct cost to support our technical infrastructure exceeds \$6500.00 per year.

Donations from our industry partners have been increasing each year. We have an established automotive technology foundation that has received monetary gifts. This foundation provides student scholarships. The local new car manufacturers have provided us with new cars over the past two years. In 2006 Hyundai Motor America donated a new Hyundai. In September of 2007 Kia Motor America has committed to donating four new vehicles. We have also arranged to have two new Kia vehicles donated to our local high school automotive programs. This donation will help provide vehicles with the latest automotive technology for student learning.

## **Section III: Needs Assessment**

### **A. Human Resource Needs**

The percentages of classroom hours assigned to full-time and associate faculty are 75% and 25%, respectively (Spring 2006). The two full-time instructors currently accept overload. One full-time instructor has additional department chair duties.

We currently meet the campus goal of 75% full time and 25% part time hours. To expand our department and add additional courses as requested by our advisory committee requires that new part-time instructors be added to expand our department course offerings. We need the support of the administration to supply the necessary funding and extra course FTE when it is identified in the NATEF certification process.

In order for the program to maintain its current level of offerings and to approach a 75%-25% split, it will be necessary to keep at least two full-time instructors. To address the additional NATEF requirements we estimate that we will need at least one additional full time instructor. NATEF requires additional student contact hours and our curriculum will need to address these requirements. The total number of course hours will present necessary changes in our staffing, both instructional and classified. These projected changes will be addressed in our NATEF proposal report.

As in most departments, our part-time faculties come from a variety of backgrounds. They could be employed technicians, retired teachers and/or teach high school or at multiple colleges in addition to their commitment to Saddleback College. While their contributions have been invaluable over the past years, the level of commitment cannot be the same as that of a full-time faculty member committed to the success of the students at Saddleback, and to the department and division's mission statement.

In examining our requirements for classified staff we have identified an immediate need. This need has direct impact on our future NATEF certification as well. We need a full time lab technician during the day as well as a part time lab technician, at 20 hours per week, for our additional classes at night. It is detrimental to student lab safety, computer lab security, and shop equipment security and safe operation by not meeting these two requests. We would ask for these requests to be implemented immediately.

The future NATEF certification of the Automotive Technology program is predicated on the addition of at least one additional full time faculty member and our classified support staff changes. This will hopefully enable us to meet

minimum NATEF standards and to advance our program to its full potential. We have indicated a request a full time lab assistant and a part time lab assistant at a minimum of 20 hours per week. This would change one part time 55% lab technician position to a full time position. This would provide us with one full time lab assistant and one part time lab assistant. The current classified lab assistant schedule does not meet our safety or current lab requirements. The request for a full time lab assistant was submitted to administration September 2007.

## **B. Instructional Needs**

In the past three years we eliminated outdated courses, revised course curriculum, incorporated newer technologies, and created new courses to better serve our students. There are still course additions and adjustments to be made, including the creation of more advanced sections of courses such as electrical equipment use, evaporative system diagnostics, and computer area network (CAN) diagnostics, just to name a few. Because technology within the automotive industry is changing so rapidly we must be very flexible and innovative in our approach to automotive course instruction. One goal is to provide industry professionals to offer advanced technology training to our faculty and staff. This can be done on campus or by having our instructors attend current conferences that offer direct courses that address the current technology changes within the automotive industry. This will help meet the needs of our faculty concerning the rapid technology changes affecting technicians who service and repair all makes and model year vehicles. We would like to incorporate guest speakers from within the automotive industry to provide training for our instructors. We would ask for support and funding from the administration.

## **C. Research Needs**

In addition to SLOs, the department conducts course, textbook, and faculty review surveys with all students in each course at the end of the semester. This information helps us gauge the effectiveness of a particular course, as well as gives us information about possible future courses students might be interested in. We have also sent out surveys to our industry partners asking them what they would like our students to know to successfully join their companies as entry level technicians, service bay consultants, or management staff. This survey also included specific questions regarding our student's subject matter learning objectives. This information will help us plan our course curriculum objectives for the future. Our advisory committee members provide a great resource for our future program course offerings, curriculum development and equipment needs. At this time our survey instrument shows that we are meeting and in most areas exceeding their expectations.

#### **D. Technical, Equipment and Other Resource Needs**

We are continually faced with the challenge of being able to offer industry-current curriculum, equipment, tools and instruction. While traditional automotive concepts remain the same, vehicle technology is rapidly changing. With the advent of hybrid vehicles, hydrogen fuel cells, plug-in electric vehicles, just to name a few examples, technology is changing almost every month. This compels us to stay as current as possible both with automotive computer system advances, alternative fuel vehicles and the emerging technology that we will see within the next few years. This will require a substantial investment in our facility training, equipment and staff. We need to increase our basic department budget to meet the current support that our classrooms, students and shop needs. Our department budget has remained stagnant for more than the last three years. It does not meet our minimum needs. This increase would provide the necessary supplies, shop maintenance and monthly expenses that are required to keep our program at the highest standards. Our goal is to give students the best educational experience and provide them the opportunity to enter the workforce with current and valuable workplace skills. To help meet these goals the Automotive Technology department seeks the continued support and help of the South Orange County Community College District to maintain and renovate our equipment, tools and facilities.

#### **E. Facilities Needs**

Our department is slowly rebuilding from the inside out. We request the TAS building exterior be repainted including the automotive department and its outside buildings. This would also include the metal fence; gate and metal rod iron fencing that encloses three small sections of the lab area. The building and fences are in very poor condition. These areas are visible when entering or working in the lab area. We are proud of our department and would like to address this visual hardship. We wish to present a professional appearance and without this maintenance this is not possible. This building maintenance has not been done since the building was built over 15 years ago. The automotive lab area parking lot is in need of repair, resurfacing and restriping. This has become a major maintenance and safety issue. We hope that the administration will address these requests immediately.

#### **F. Marketing and Outreach Needs**

The department participates in campus-sponsored events such as family night, senior day, student welcome day, etc. We also send out mailers to the over 24 local Orange County high school campuses in South Orange County. These

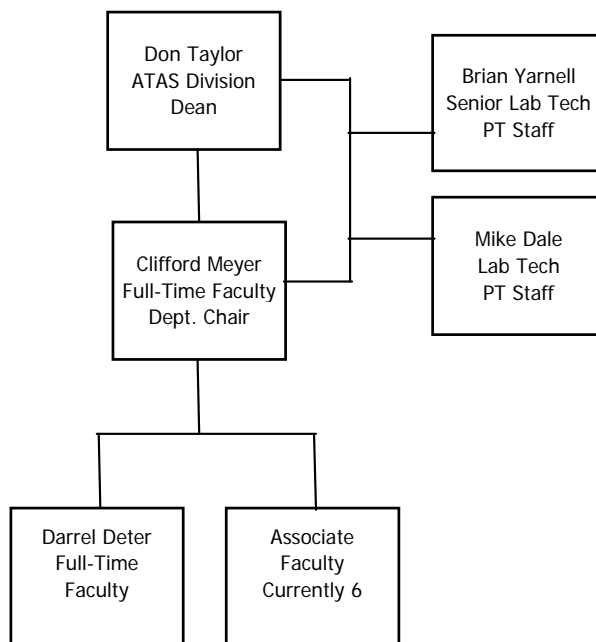
mailers include class offerings, times and dates of instruction. We also provide fliers to our industry partners for their technicians that need BAR certified update courses, advanced technical training or just a course on a subject area need. We also participate in articulation agreements with our local high schools. Some high schools still offer automotive technology as part of their current curriculum. Some do not. Enrolling in our program provides continuing students with credit for our Auto 100 fundamentals course. Some of our staff supports our local high schools by being members of their automotive advisory committee. Further outreach activities to high schools would be beneficial, as well as better utilization of campus marketing venues. At this time our staff participates in many of the Saddleback campus events held each semester. A new marketing project for the automotive technology department will be placing posters at all of our local high schools. The cost of this project is estimated to cost between \$2000.00-\$2500.00. We also hope to be able to create a new auto tech website. The estimated cost of this project would be approximately \$12,000.00-\$15,000.00.

## **Section IV: Appendices**

- A. Program Organizational Chart**
- B. Five-Year Program Staffing Profile**
- C. SLO Assessment Forms**
- D. Data Sets**

## A. Program Organizational Chart

### Saddleback College Advanced Technology & Applied Science Division Automotive Technology Organization Chart



## B. Five Year Staffing Chart

Position	Staffing Levels for Each of the Previous Five Years					% Change from Year 1 to Year 5
	2001	2002	2003	2004	2005	
Administration	1	1	1	1	1	0%
Bargaining Classified Staff FT	0	0	0	0	0	0%
Bargaining Classified Staff PT	2	2	2	2	2	0%
Non-Bargaining Classified Staff FT	0	0	0	0	0	0%
Non-Bargaining Classified Staff PT	0	0	0	0	0	0%
Student Workers	0	0	0	0	0	0%
Faculty FT	1	1	1	1	2	0%
Faculty PT	6	5	5	5	6	0%

## C. SLO Assessment Forms

### AUTOMOTIVE TECHNOLOGY June 2007

I Expanded Statement of Institutional Purpose	II Program Student Learning Outcomes	III Assessment Method and Criteria for Success	IV Assessment Results	V Use of Results
<p><b>Saddleback College Mission:</b> Vocational Certificates of Achievement and Occupational Skills awards are designed to prepare students to qualify for positions in business and industry, technical fields, and selected professions (Vocational and Occupational Education).</p> <p><b>Automotive Technology Goal:</b></p> <p>To prepare students to be employed in the automotive industries by providing high-quality courses and certificate programs that allow students to complete their educational goals.</p>	<p>1. Graduates of the Automotive Technology Program will be successfully employed in the local industry.</p> <p>2. Graduates of the Automotive Technology Program will</p>	<p>1. 70% of the responding graduates of the Automotive Technology Program will report employment in the field on the Graduating Student Survey administered at the time of certificate completion. We administered questions to students who were filing for certificates of completion and or graduating.</p> <p>2. Students will complete a final exam with imbedded</p>	<p>1a. 94% of responding students are employed in the automotive field. These results are from Fall 06 and Spring 07 semesters.</p> <p>2. On the final exam with embedded questions were</p>	<p>1. Even though we have meet our objective, we will continue to monitor our students' placement with local industry partners. Our current goal is to establish CWE co-operative work experience training with our local industry partners.</p> <p>2. The results of the embedded questions did not meet the</p>

I Expanded Statement of Institutional Purpose	II Program Student Learning Outcomes	III Assessment Method and Criteria for Success	IV Assessment Results	V Use of Results
	<p>have industry specific skills.</p> <p>3. Employers of the Automotive Technology Program</p>	<p>questions in each course to assess ASE certification in a specific skill area. 80% of the students will score with a passing grade in all areas of skills.</p> <p>3. 90% of the respondents to an Employer Survey conducted every 2</p>	<p>calculated spring 2006. 230 students took the final exam in all classes. One hundred thirty or 58% of the students answered the questions successfully with a score of "C" or higher.</p> <p>2a. Final exam embedded questions were calculated spring 2007. Two hundred twenty-four students took the final exam in all classes. Of those students 60% scored a "C" or higher..</p> <p>3. Industry partners were surveyed in May 2007. Survey</p>	<p>expected outcomes. The department is meeting to evaluate our course materials and assess instruction that needs to be augmented. All courses will give additional testing during the semester to evaluate student learning. Lecture and lab activities will be adjusted to meet each course learning outcomes.</p> <p>3. In addition to meeting our objective, the survey results</p>

I Expanded Statement of Institutional Purpose	II Program Student Learning Outcomes	III Assessment Method and Criteria for Success	IV Assessment Results	V Use of Results
	<p>students in the South Orange County area will be satisfied with the education received by their employees.</p>	<p>years by the Automotive Technology department will respond that they are satisfied and would continue to employ current students and graduates of our program.</p>	<p>results indicate that 100% of our local industry partners are very satisfied with our students.</p>	<p>indicate a major demand for entry level technicians in the South Orange County area.</p> <p>The auto tech department advisory committee is made up of our local industry partners. We will continue to meet at least two times each year to review current employee trends. We will continue to place our students with our industry partners and we are working to establish a student tracking program. This would enable us to know the number of our students employed during and after they complete their course work.</p>

I	II	III	IV	V
Expanded Statement of Institutional Purpose	Program Student Learning Outcomes	Assessment Method and Criteria for Success	Assessment Results	Use of Results

## **D. Data Sets**

# **Automotive Technology Program Review Data Set October 2006**

# **Automotive Technology Program Review Data Set**

**The following pages include:**

- 1. Course Section Count**
- 2. C1 & End of Term Headcount**
- 3. Overview of Courses, Grades, Success/Retention**
- 4. Course Grades, Success/Retention**
- 5. Automotive Technology Program Students' Duplicated Headcount**
  - a. Gender**
  - b. Zip Code**
  - c. Age Groups**
  - d. Ethnicity**
  - e. Educational Goal**
- 6. Certificates Awarded**

**Data Source: SOCCCD Management Information System (MIS) Data  
Warehouse October 2006**

**Prepared by Denice Inciong, Research and Planning Analyst, Saddleback  
College**

# Course Section Count

Automotive Technology Courses  
Course and Section Count by Term and Year

	Fall					Summer						Spring					
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	2006	2001	2002	2003	2004	2005	2006
	Section Count	Section Count	Section Count	Section Count	Section Count	Section Count	Section Count	Section Count	Section Count	Section Count	Section Count	Section Count	Section Count	Section Count	Section Count	Section Count	Section Count
AUTO 100	3	5	5	5	5	1	1	1	1	1	1	5	5	5	6	5	5
AUTO 101	2	1	1	1	1	0	0	0	0	0	0	1	2	1	0	0	2
AUTO 102	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1
AUTO 103	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0
AUTO 104A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
AUTO 104B	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
AUTO 105	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
AUTO 106A	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1
AUTO 106B	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
AUTO 107	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
AUTO 108	0	0	0	1	1	1	1	0	0	0	0	0	0	1	1	1	1
AUTO 109	1	1	1	1	1	0	0	0	0	0	0	1	0	0	1	1	1
AUTO 204	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1
AUTO 205	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
AUTO 220	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Total	13	14	13	14	15	2	2	1	1	1	3	14	13	13	14	13	15

# C1 Headcount

Automotive Technology Courses  
C1 Headcount by Course/Term/Year

	Fall					Summer						Spring					
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	2006	2001	2002	2003	2004	2005	2006
	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount	C1 Headcount
AUTO 100	87	130	133	125	128	20	23	24	21	22	23	88	127	105	141	108	107
AUTO 101	38	23	26	29	32	.	.	.	.	.	.	25	44	20	.	.	45
AUTO 102	25	26	27	25	25	.	.	.	.	.	.	28	27	24	30	30	22
AUTO 103	26	27	28	29	31	.	.	.	.	.	.	23	.	.	.	.	.
AUTO 104	29	31	29	26	26	.	.	.	.	.	.	.	.	.	.	.	.
AUTO 104	.	.	.	.	.	.	.	.	.	.	.	27	27	22	24	26	23
AUTO 105	.	.	.	.	.	.	.	.	.	.	.	18	26	23	28	23	20
AUTO 106	30	26	28	30	20	.	.	.	.	.	.	.	31	29	32	35	26
AUTO 106	.	.	.	.	.	.	.	.	.	.	.	19	25	23	29	32	24
AUTO 107	18	25	26	25	21	.	.	.	.	.	.	.	.	.	.	.	.
AUTO 108	.	.	.	25	14	20	27	.	.	.	.	.	.	27	29	28	15
AUTO 109	19	18	18	19	20	.	.	.	.	.	.	18	.	.	15	21	17
AUTO 204	21	22	21	22	18	.	.	.	.	.	.	19	22	21	20	22	17
AUTO 205	.	.	.	.	18	.	.	.	.	.	29	.	.	.	.	.	.
AUTO 220	14	14	.	.	.	.	.	.	.	.	.	15	.	.	.	.	.
Total	307	342	336	355	353	40	50	24	21	22	52	280	329	294	348	325	316

# End of Term Headcount

**Automotive Technology Courses  
Course and Section Count by Term and Year**

	Fall					Summer						Spring					
	2001 Section Count	2002 Section Count	2003 Section Count	2004 Section Count	2005 Section Count	2001 Section Count	2002 Section Count	2003 Section Count	2004 Section Count	2005 Section Count	2006 Section Count	2001 Section Count	2002 Section Count	2003 Section Count	2004 Section Count	2005 Section Count	2006 Section Count
AUTO 100	3	5	5	5	5	1	1	1	1	1	1	5	5	5	6	5	5
AUTO 101	2	1	1	1	1	0	0	0	0	0	0	1	2	1	0	0	2
AUTO 102	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1
AUTO 103	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0
AUTO 104A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
AUTO 104B	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
AUTO 105	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
AUTO 106A	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1
AUTO 106B	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
AUTO 107	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
AUTO 108	0	0	0	1	1	1	1	0	0	0	0	0	0	1	1	1	1
AUTO 109	1	1	1	1	1	0	0	0	0	0	0	1	0	0	1	1	1
AUTO 204	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1
AUTO 205	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0
AUTO 220	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
<b>Total</b>	<b>13</b>	<b>14</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>14</b>	<b>13</b>	<b>13</b>	<b>14</b>	<b>13</b>	<b>15</b>

# Summary of Courses by Grade/Success/Retention

## Automotive Technology Courses Summary of All Courses by Grade/Success/Retention

		Grades											success	retention
		A	B	C	CR	D	F	I	NC	W	XX	Total		
		Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Percent	Percent
2001	Spring	68	57	54	7	14	33	3	2	28	17	283	65.7%	90.1%
	Summer	10	10	10	5	1	1	0	0	2	2	41	85.4%	95.1%
	Fall	61	80	75	9	13	18	2	2	39	9	308	73.1%	87.3%
2002	Spring	49	64	68	10	21	31	5	1	60	22	331	57.7%	81.9%
	Summer	8	10	16	1	4	4	0	0	7	1	51	68.6%	86.3%
	Fall	79	84	64	6	21	24	0	3	46	21	348	67.0%	86.8%
2003	Spring	67	74	53	7	20	24	0	2	38	9	294	68.4%	87.1%
	Summer	13	4	3	0	2	1	0	0	0	2	25	80.0%	100.0%
	Fall	73	92	77	7	19	36	0	2	28	10	344	72.4%	91.9%
2004	Spring	90	97	64	7	14	36	0	2	29	9	348	74.1%	91.7%
	Summer	10	7	2	2	0	1	0	1	0	1	24	87.5%	100.0%
	Fall	77	111	62	8	16	33	0	0	39	13	359	71.9%	89.1%
2005	Spring	88	88	72	4	8	23	0	0	36	7	326	77.3%	89.0%
	Summer	9	8	0	0	1	1	0	0	1	2	22	77.3%	95.5%
	Fall	83	127	60	5	13	31	1	0	27	7	354	77.7%	92.4%
2006	Spring	70	95	49	7	20	19	0	1	40	15	316	69.9%	87.3%
	Summer	38	8	0	1	1	2	0	1	4	7	62	75.8%	93.5%

Grade XX = None of the above/unknown.

Success Rate: Percent of students successful in courses out of total enrolled in courses (RP Group, 1996).

The success rate is calculated by dividing the numerator (number of students duplicated with A, B, C, CR) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX)

Retention Rate: Percent of students retained in courses out of total students enrolled in courses (RP Group, 1996).

The retention rate is calculated by dividing the numerator (number of students duplicated with A, B, C, D, F, CR, NC, I, XX) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX).

# AUTO 100 by Grade/Success/Retention

## Automotive Technology Courses Courses by Grade/Success/Retention

		Grades											success	retention	
		A	B	C	CR	D	F	I	NC	W	XX	Total	Percent	Percent	
		Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Percent	Percent	
AUTO 100	2001	Spring	20	12	8	3	6	16	0	1	13	12	91	47.3%	85.7%
		Summer	4	4	6	2	0	1	0	0	2	1	20	80.0%	90.0%
		Fall	20	19	16	0	5	7	0	1	18	2	88	62.5%	79.5%
	2002	Spring	17	21	15	2	11	13	0	1	32	16	128	43.0%	75.0%
		Summer	3	5	6	1	2	1	0	0	5	1	24	62.5%	79.2%
		Fall	34	24	20	1	8	10	0	0	22	12	131	60.3%	83.2%
	2003	Spring	26	20	14	0	10	8	0	0	22	5	105	57.1%	79.0%
		Summer	13	4	3	0	2	1	0	0	0	2	25	80.0%	100.0%
		Fall	41	21	23	5	10	11	0	1	16	5	133	67.7%	88.0%
	2004	Spring	41	27	13	3	8	26	0	1	15	7	141	59.6%	89.4%
		Summer	10	7	2	2	0	1	0	1	0	1	24	87.5%	100.0%
		Fall	32	29	16	3	6	12	0	0	22	7	127	63.0%	82.7%
	2005	Spring	22	23	22	1	5	11	0	0	21	3	108	63.0%	80.6%
		Summer	9	8	0	0	1	1	0	0	1	2	22	77.3%	95.5%
		Fall	32	41	12	3	5	20	1	0	12	3	129	68.2%	90.7%
	2006	Spring	28	26	9	3	5	5	0	1	24	6	107	61.7%	77.6%
		Summer	8	6	0	1	1	1	0	1	0	5	23	65.2%	100.0%

Grade XX = None of the above/unknown.

Success Rate: Percent of students successful in courses out of total enrolled in courses (RP Group, 1996).

The success rate is calculated by dividing the numerator (number of students duplicated with A, B, C, CR) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX)

Retention Rate: Percent of students retained in courses out of total students enrolled in courses (RP Group, 1996).

The retention rate is calculated by dividing the numerator (number of students duplicated with A, B, C, D, F, CR, NC, I\*, XX) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX).

# AUTO 101 & AUTO 102 by Grade/Success/Retention

## Automotive Technology Courses Courses by Grade/Success/Retention

		Grades											success	retention	
		A	B	C	CR	D	F	I	W	XX	Total	Percent	Percent		
		Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Percent	Percent		
AUTO 101	2001	Spring	4	3	6	1	0	6	0	2	3	25	56.0%	92.0%	
		Fall	5	6	13	2	1	2	0	8	1	38	68.4%	78.9%	
	2002	Spring	6	9	10	0	4	1	1	10	3	44	56.8%	77.3%	
		Fall	6	6	1	0	0	3	0	6	1	23	56.5%	73.9%	
	2003	Spring	3	3	4	0	2	2	0	4	2	20	50.0%	80.0%	
		Fall	4	6	8	0	1	3	0	4	0	26	69.2%	84.6%	
	2004	Fall	2	4	9	0	2	2	0	7	3	29	51.7%	75.9%	
	2005	Fall	4	18	7	0	2	1	0	0	0	32	90.6%	100.0%	
	2006	Spring	11	16	8	0	4	1	0	4	1	45	77.8%	91.1%	
	AUTO 102	2001	Spring	4	5	9	1	2	3	1	1	2	28	67.9%	96.4%
			Fall	3	4	8	0	2	2	0	4	2	25	60.0%	84.0%
		2002	Spring	3	6	6	0	2	5	0	3	2	27	55.6%	88.9%
Fall			3	6	9	0	4	2	0	3	1	28	64.3%	89.3%	
2003		Spring	4	6	5	0	1	3	0	5	0	24	62.5%	79.2%	
		Fall	4	5	9	1	1	6	0	3	0	29	65.5%	89.7%	
2004		Spring	5	7	7	2	1	3	0	5	0	30	70.0%	83.3%	
		Fall	3	5	6	0	3	4	0	3	1	25	56.0%	88.0%	
2005		Spring	15	4	6	0	0	2	0	2	1	30	83.3%	93.3%	
		Fall	7	9	3	0	1	1	0	4	0	25	76.0%	84.0%	
2006		Spring	1	8	4	0	3	1	0	2	3	22	59.1%	90.9%	

Grade XX = None of the above/unknown.

Success Rate: Percent of students successful in courses out of total enrolled in courses (RP Group, 1996).

The success rate is calculated by dividing the numerator (number of students duplicated with A, B, C, CR) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX)

Retention Rate: Percent of students retained in courses out of total students enrolled in courses (RP Group, 1996).

The retention rate is calculated by dividing the numerator (number of students duplicated with A, B, C, D, F, CR, NC, I\*, XX) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX).

# AUTO 103, AUTO 104A, & AUTO 104B by Grade/Success/Retention

## Automotive Technology Courses Courses by Grade/Success/Retention

		Grades											success	retention	
		A	B	C	CR	D	F	I	NC	W	XX	Total	Percent	Percent	
		Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Percent	Percent	
AUTO 103	2001	Spring	4	5	7	1	1	1	2	0	2	0	23	73.9%	91.3%
		Fall	9	6	5	0	0	2	0	1	3	0	26	76.9%	88.5%
	2002	Fall	4	8	10	0	3	0	0	1	1	0	27	81.5%	96.3%
	2003	Fall	4	13	6	0	4	2	0	0	0	0	29	79.3%	100.0%
	2004	Fall	5	14	4	0	1	3	0	0	1	1	29	79.3%	96.6%
	2005	Fall	4	16	9	0	0	1	0	0	0	1	31	93.5%	100.0%
AUTO 104A	2001	Fall	6	11	9	1	1	0	0	0	0	1	29	93.1%	100.0%
	2002	Fall	7	14	4	1	2	2	0	0	1	0	31	83.9%	96.8%
	2003	Fall	5	13	8	0	0	2	0	0	0	1	29	89.7%	100.0%
	2004	Fall	9	9	7	1	0	0	0	0	0	0	26	100.0%	100.0%
		2005	Fall	9	6	7	1	0	1	0	0	2	0	26	88.5%
AUTO 104B	2001	Spring	12	7	5	0	1	0	0	0	2	0	27	88.9%	92.6%
	2002	Spring	6	5	7	2	3	1	0	0	2	1	27	74.1%	92.6%
	2003	Spring	5	14	1	0	0	2	0	0	0	0	22	90.9%	100.0%
	2004	Spring	11	5	5	0	2	0	0	0	1	0	24	87.5%	95.8%
	2005	Spring	8	7	8	1	1	0	0	0	1	0	26	92.3%	96.2%
		2006	Spring	6	11	3	2	0	1	0	0	0	23	95.7%	100.0%

Grade XX = None of the above/unknown.

Success Rate: Percent of students successful in courses out of total enrolled in courses (RP Group, 1996).

The success rate is calculated by dividing the numerator (number of students duplicated with A, B, C, CR) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX)

Retention Rate: Percent of students retained in courses out of total students enrolled in courses (RP Group, 1996).

The retention rate is calculated by dividing the numerator (number of students duplicated with A, B, C, D, F, CR, NC, I\*, XX) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX).

# AUTO 105, AUTO 106A, & AUTO 106B by Grade/Success/Retention

Automotive Technology Courses  
Courses by Grade/Success/Retention

			Grades										success	retention	
			A	B	C	CR	D	F	I	NC	W	XX	Total		
			Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Percent	Percent
AUTO 105	2001	Spring	4	1	6	0	2	2	0	0	3	0	18	61.1%	83.3%
	2002	Spring	1	3	11	1	0	6	0	0	4	0	26	61.5%	84.6%
	2003	Spring	4	4	7	1	0	3	0	1	3	0	23	69.6%	87.0%
	2004	Spring	8	10	6	0	0	1	0	0	3	0	28	85.7%	89.3%
	2005	Spring	2	7	6	0	0	3	0	0	5	0	23	65.2%	78.3%
	2006	Spring	4	6	1	0	3	3	0	0	1	2	20	55.0%	95.0%
AUTO 106A	2001	Fall	3	7	11	3	1	1	1	0	2	1	30	80.0%	93.3%
	2002	Spring	5	6	11	2	0	2	4	0	2	0	32	75.0%	93.8%
		Fall	2	9	6	3	2	2	0	0	2	1	27	74.1%	92.6%
	2003	Spring	3	14	6	2	2	1	0	0	1	0	29	86.2%	96.6%
		Fall	3	9	11	0	0	1	0	0	2	2	28	82.1%	92.9%
	2004	Spring	7	10	7	1	1	3	0	0	3	0	32	78.1%	90.6%
		Fall	2	16	5	0	0	3	0	0	3	1	30	76.7%	90.0%
	2005	Spring	4	12	15	0	0	1	0	0	2	1	35	88.6%	94.3%
		Fall	2	7	5	0	0	2	0	0	3	1	20	70.0%	85.0%
	2006	Spring	0	8	8	0	3	1	0	0	5	1	26	61.5%	80.8%
	2001	Spring	3	9	5	0	0	0	0	0	2	0	19	89.5%	89.5%
	AUTO 106B	2002	Spring	6	6	2	2	1	1	0	0	7	0	25	64.0%
2003		Spring	7	4	6	2	1	2	0	0	1	0	23	82.6%	95.7%
2004		Spring	3	17	9	0	0	0	0	0	0	0	29	100.0%	100.0%
2005		Spring	8	15	5	0	0	2	0	0	2	0	32	87.5%	93.8%
2006		Spring	3	8	6	1	1	3	0	0	1	1	24	75.0%	95.8%

Grade XX = None of the above/unknown.

Success Rate: Percent of students successful in courses out of total enrolled in courses (RP Group, 1996).

The success rate is calculated by dividing the numerator (number of students duplicated with A, B, C, CR) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX)

Retention Rate: Percent of students retained in courses out of total students enrolled in courses (RP Group, 1996).

The retention rate is calculated by dividing the numerator (number of students duplicated with A, B, C, D, F, CR, NC, I, XX) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX).

# AUTO 107, AUTO 108, & AUTO 109 by Grade/Success/Retention

Automotive Technology Courses  
Courses by Grade/Success/Retention

			Grades										success	retention	
			A	B	C	CR	D	F	I	NC	W	XX	Total		
			Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Percent	Percent
AUTO 107	2001	Fall	2	1	6	1	1	3	1	0	2	1	18	55.6%	88.9%
	2002	Fall	2	8	7	0	1	4	0	1	2	0	25	68.0%	92.0%
	2003	Fall	3	5	6	0	2	6	0	1	1	2	26	53.8%	96.2%
	2004	Fall	4	12	3	0	2	3	0	0	1	0	25	76.0%	96.0%
	2005	Fall	4	5	7	0	0	3	0	0	2	0	21	76.2%	90.5%
AUTO 108	2001	Summer	6	6	4	3	1	0	0	0	0	1	21	90.5%	100.0%
	2002	Summer	5	5	10	0	2	3	0	0	2	0	27	74.1%	92.6%
	2003	Spring	3	4	7	1	4	3	0	1	2	2	27	55.6%	92.6%
	2004	Spring	5	9	9	0	0	2	0	1	2	1	29	79.3%	93.1%
		Fall	5	6	3	3	1	5	0	0	2	0	25	68.0%	92.0%
	2005	Spring	9	9	5	0	0	3	0	0	2	0	28	82.1%	92.9%
		Fall	3	7	4	0	0	0	0	0	0	0	14	100.0%	100.0%
	2006	Spring	5	5	2	0	0	1	0	0	1	1	15	80.0%	93.3%
	AUTO 109	2001	Spring	3	8	4	0	2	1	0	0	0	0	18	83.3%
		Fall	0	9	6	2	1	1	0	0	0	0	19	89.5%	100.0%
2002		Fall	3	5	3	0	0	1	0	0	4	4	20	55.0%	80.0%
2003		Fall	3	11	4	1	1	3	0	0	0	0	23	82.6%	100.0%
2004		Spring	4	3	5	1	1	1	0	0	0	0	15	86.7%	100.0%
		Fall	6	6	5	0	1	1	0	0	0	0	19	89.5%	100.0%
2005		Spring	10	7	3	0	0	1	0	0	0	1	22	90.9%	100.0%
		Fall	1	12	4	1	1	1	0	0	0	0	20	90.0%	100.0%
2006		Spring	8	3	4	0	0	2	0	0	0	0	17	88.2%	100.0%

Grade XX = None of the above/unknown.

Success Rate: Percent of students successful in courses out of total enrolled in courses (RP Group, 1996).

The success rate is calculated by dividing the numerator (number of students duplicated with A, B, C, CR) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX)

Retention Rate: Percent of students retained in courses out of total students enrolled in courses (RP Group, 1996).

The retention rate is calculated by dividing the numerator (number of students duplicated with A, B, C, D, F, CR, NC, I, XX) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX).

# AUTO 204, AUTO 205, & AUTO 220 by Grade/Success/Retention

## Automotive Technology Courses Courses by Grade/Success/Retention

		Grades										success	retention	
		A	B	C	CR	D	F	NC	W	XX	Total	Percent	Percent	
		Count	Count	Count	Count	Count	Count	Count	Count	Count	Count			
AUTO 204	2001	Spring	7	6	4	0	0	0	0	2	0	19	89.5%	89.5%
		Fall	6	15	0	0	0	0	0	0	0	21	100.0%	100.0%
	2002	Spring	5	8	6	1	0	2	0	0	0	22	90.9%	100.0%
		Fall	11	4	3	0	1	0	0	3	0	22	81.8%	86.4%
	2003	Spring	12	5	3	1	0	0	0	0	0	21	100.0%	100.0%
		Fall	6	9	2	0	0	2	0	2	0	21	81.0%	90.5%
	2004	Spring	6	9	3	0	1	0	0	0	1	20	90.0%	100.0%
		Fall	9	10	4	1	0	0	0	0	0	24	100.0%	100.0%
	2005	Spring	10	4	2	2	2	0	0	1	1	22	81.8%	95.5%
		Fall	6	5	2	0	3	1	0	0	1	18	72.2%	100.0%
2006	Spring	4	4	4	1	1	1	0	2	0	17	76.5%	88.2%	
AUTO 205	2005	Fall	11	1	0	0	1	0	4	1	18	66.7%	77.8%	
	2006	Summer	30	2	0	0	0	1	0	4	2	39	82.1%	89.7%
AUTO 220	2001	Spring	7	1	0	1	0	4	1	1	0	15	60.0%	93.3%
		Fall	7	2	1	0	1	0	0	2	1	14	71.4%	85.7%
	2002	Fall	7	0	1	1	0	0	1	2	2	14	64.3%	85.7%

Grade XX = None of the above/unknown.

Success Rate: Percent of students successful in courses out of total enrolled in courses (RP Group, 1996).

The success rate is calculated by dividing the numerator (number of students duplicated with A, B, C, CR) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX)

Retention Rate: Percent of students retained in courses out of total students enrolled in courses (RP Group, 1996).

The retention rate is calculated by dividing the numerator (number of students duplicated with A, B, C, D, F, CR, NC, I\*, XX) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I, XX).

## Gender by Year/Term

### Automotive Technology Courses Gender by Year/Term Duplicated Headcount

		F		M		X		Total	
		Count	Row %	Count	Row %	Count	Row %	Count	Row %
2001	Spring	1	2.9%	33	97.1%	0	.0%	34	100.0%
	Fall	0	.0%	35	100.0%	0	.0%	35	100.0%
2002	Spring	0	.0%	22	100.0%	0	.0%	22	100.0%
	Fall	0	.0%	36	100.0%	0	.0%	36	100.0%
2003	Spring	1	4.8%	20	95.2%	0	.0%	21	100.0%
	Fall	1	4.8%	20	95.2%	0	.0%	21	100.0%
2004	Spring	0	.0%	20	100.0%	0	.0%	20	100.0%
	Fall	2	8.3%	22	91.7%	0	.0%	24	100.0%
2005	Spring	1	4.5%	21	95.5%	0	.0%	22	100.0%
	Fall	2	5.6%	34	94.4%	0	.0%	36	100.0%
2006	Spring	1	5.9%	16	94.1%	0	.0%	17	100.0%
	Summer	0	.0%	38	97.4%	1	2.6%	39	100.0%

# Courses by Zip Code

Automotive Technology Courses by Zip Code  
Duplicated Headcount

		Saddleback Zip		Irvine Zip		Out of District or Missing		Total	
		Count	Row %	Count	Row %	Count	Row %	Count	Row %
2001	Spring	29	85.3%	2	5.9%	3	8.8%	34	100.0%
	Fall	26	74.3%	4	11.4%	5	14.3%	35	100.0%
2002	Spring	18	81.8%	2	9.1%	2	9.1%	22	100.0%
	Fall	28	77.8%	2	5.6%	6	16.7%	36	100.0%
2003	Spring	18	85.7%	0	.0%	3	14.3%	21	100.0%
	Fall	18	85.7%	3	14.3%	0	.0%	21	100.0%
2004	Spring	16	80.0%	3	15.0%	1	5.0%	20	100.0%
	Fall	18	75.0%	5	20.8%	1	4.2%	24	100.0%
2005	Spring	18	81.8%	3	13.6%	1	4.5%	22	100.0%
	Fall	25	69.4%	3	8.3%	8	22.2%	36	100.0%
2006	Spring	14	82.4%	1	5.9%	2	11.8%	17	100.0%
	Summer	24	61.5%	3	7.7%	12	30.8%	39	100.0%

# Age Distribution by Year/Term

Automotive Technology Courses  
Age Group Distribution by Year/Term  
Duplicated Headcount

		Age Groups														Total	
		Below 17		18-21		22-25		26-35		36-50		51-65		Over 65		Count	Row %
		Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %		
2001	Spring	1	2.9%	17	50.0%	9	26.5%	2	5.9%	1	2.9%	2	5.9%	2	5.9%	34	100.0%
	Fall	0	.0%	15	42.9%	3	8.6%	5	14.3%	5	14.3%	6	17.1%	1	2.9%	35	100.0%
2002	Spring	0	.0%	10	45.5%	5	22.7%	1	4.5%	3	13.6%	3	13.6%	0	.0%	22	100.0%
	Fall	1	2.8%	17	47.2%	5	13.9%	4	11.1%	5	13.9%	4	11.1%	0	.0%	36	100.0%
2003	Spring	0	.0%	11	52.4%	4	19.0%	1	4.8%	2	9.5%	3	14.3%	0	.0%	21	100.0%
	Fall	0	.0%	13	61.9%	2	9.5%	2	9.5%	2	9.5%	1	4.8%	1	4.8%	21	100.0%
2004	Spring	0	.0%	9	45.0%	4	20.0%	1	5.0%	4	20.0%	2	10.0%	0	.0%	20	100.0%
	Fall	0	.0%	17	70.8%	4	16.7%	0	.0%	2	8.3%	0	.0%	1	4.2%	24	100.0%
2005	Spring	0	.0%	14	63.6%	4	18.2%	0	.0%	2	9.1%	2	9.1%	0	.0%	22	100.0%
	Fall	2	5.6%	11	30.6%	7	19.4%	3	8.3%	10	27.8%	3	8.3%	0	.0%	36	100.0%
2006	Spring	1	5.9%	8	47.1%	5	29.4%	0	.0%	1	5.9%	2	11.8%	0	.0%	17	100.0%
	Summer	0	.0%	2	5.1%	4	10.3%	1	2.6%	22	56.4%	10	25.6%	0	.0%	39	100.0%

# Ethnicity by Year/Term

Automotive Technology Courses  
Ethnicity by Year/Term  
Duplicated Headcount

		Ethnic Groups															
		Asian		African American		Hispanic		American Indian/Alaskan Native		Other		White		Unknown		Total	
		Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
2001	Spring	0	.0%	0	.0%	6	17.6%	0	.0%	2	5.9%	23	67.6%	3	8.8%	34	100.0%
	Fall	5	14.3%	0	.0%	5	14.3%	0	.0%	0	.0%	18	51.4%	7	20.0%	35	100.0%
2002	Spring	4	18.2%	0	.0%	2	9.1%	0	.0%	0	.0%	10	45.5%	6	27.3%	22	100.0%
	Fall	4	11.1%	0	.0%	1	2.8%	0	.0%	0	.0%	24	66.7%	7	19.4%	36	100.0%
2003	Spring	1	4.8%	0	.0%	3	14.3%	0	.0%	0	.0%	13	61.9%	4	19.0%	21	100.0%
	Fall	1	4.8%	0	.0%	4	19.0%	0	.0%	0	.0%	13	61.9%	3	14.3%	21	100.0%
2004	Spring	1	5.0%	0	.0%	3	15.0%	0	.0%	0	.0%	12	60.0%	4	20.0%	20	100.0%
	Fall	2	8.3%	1	4.2%	5	20.8%	1	4.2%	0	.0%	12	50.0%	3	12.5%	24	100.0%
2005	Spring	1	4.5%	1	4.5%	4	18.2%	1	4.5%	0	.0%	13	59.1%	2	9.1%	22	100.0%
	Fall	8	22.2%	0	.0%	4	11.1%	0	.0%	1	2.8%	20	55.6%	3	8.3%	36	100.0%
2006	Spring	1	5.9%	0	.0%	1	5.9%	1	5.9%	0	.0%	11	64.7%	3	17.6%	17	100.0%
	Summer	6	15.4%	0	.0%	6	15.4%	2	5.1%	0	.0%	19	48.7%	6	15.4%	39	100.0%

# Educational Goals by Year/Term

Automotive Technology Courses  
Educational Goals by Year/Term  
Duplicated Headcount

	2001		2002		2003		2004		2005		2006	
	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	
	Count	Column %	Count	Column %	Count	Column %	Count	Column %	Count	Column %	Count	Column %
AA/AS and transfer	6	17.6%	5	14.3%	1	4.5%	5	13.9%	1	4.8%	2	9.5%
Transfer w/o A.	2	5.9%	0	.0%	2	9.1%	1	2.8%	1	4.8%	0	.0%
2-yr Voc. w/out	3	8.8%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Voc. certif. w/o	7	20.6%	4	11.4%	3	13.6%	9	25.0%	5	23.8%	2	9.5%
Discover interest	2	5.9%	3	8.6%	5	22.7%	4	11.1%	3	14.3%	2	9.5%
Acquire job skills	7	20.6%	7	20.0%	3	13.6%	5	13.9%	4	19.0%	6	28.6%
Update job skills	1	2.9%	5	14.3%	2	9.1%	5	13.9%	2	9.5%	1	4.8%
Maintain cert. c	0	.0%	1	2.9%	0	.0%	0	.0%	0	.0%	0	.0%
Ed. development	2	5.9%	4	11.4%	3	13.6%	2	5.6%	1	4.8%	1	4.8%
Basic Skills	0	.0%	1	2.9%	0	.0%	0	.0%	2	9.5%	1	5.0%
Undecided	4	11.8%	5	14.3%	3	13.6%	5	13.9%	4	19.0%	5	23.8%
<b>Total</b>	<b>34</b>	<b>100.0%</b>	<b>35</b>	<b>100.0%</b>	<b>22</b>	<b>100.0%</b>	<b>36</b>	<b>100.0%</b>	<b>21</b>	<b>100.0%</b>	<b>21</b>	<b>100.0%</b>

## Certificate Report

<b>Automotive Technology Program Certificates</b>	<b>2005-06</b>	<b>2004-05</b>
Automotive Chassis Specialist	7	4
Automotive Engine Performance Specialist	5	5
Automotive Engine Performance Specialist (Previously Tune-up Specialist)	5	5
General Automotive Technician	5	5

Data Source: SOCCCD Awards Management System, October 5, 2006

## Degree Report

<b>Automotive Technology Program Associates in Arts</b>	<b>2005- 06</b>
General Automotive Technician	1

Data Source: SOCCCD Awards Management System, October 5, 2006