To: Douglas Dykstra, VCAA, CERC Chair

From: Lloyd Sanborn, Mike Saito

Re: CERC Requested Improvements to ABRP Program Review

Below you will find our reply to the comments and concerns expressed by the College Effectiveness review Committee. We are appreciative of their thorough review and constructive feedback to assist in our process to clarify the necessary steps of our action plan and budget.

Program Goals

Teach the basic fundamentals of auto body repair and painting, salable skills, good work attitudes, and strive to for 60-80% of its graduates with 100% job placement with entry-level skills or higher, into the auto body collision repair field or related occupations. With the remaining graduates guided to other field of occupations or unrelated decisions.

Provide students hands-on experience through pseudo projects, from donated body panels and vehicles to meet the competencies needed to do live projects. Team up students into groups of two or three and assign teams various types of live projects. Instructors need to solicit and select a minimum of six to ten live projects annually according to students' skill level from inter-department, faculty, staff, student/family and community.

Keep abreast of changing technology by attending work shops and seminars offered here, neighbor islands and also on the mainland. Implement that information into the curriculum and teaching. Our equipment inventory shows many depreciated items which are still useable, and may or may not be feasible to upgrade. We prioritize our equipment needs not by what is good to have and used frequently, but by what is really needed now and used a great deal by students to succeed as entry-level technicians.

ASE Certification

The most important and well-known certification program in the United States is the Automotive Service Excellence Program or ASE Certification. Certification is voluntary and is not required by law. Certification protects the general public and the professional. It assures the general public and the prospective employer that certain minimum standards of performance have been met. Many employers now expect their collision repair and refinishing technicians to be certified. The certified technician is recognized as a professional and usually receives higher pay than one who is not certified. There are five ASE Certification exams in the collision repair area, Painting and Refinishing, Nonstructural Analysis and Damage Repair, Mechanical and Electrical Components, Structural Analysis and Damage Repair, and Damage Analysis and Estimating. Each area will certify the technician as a Certified Technician or after completion of all five areas, receive a Master Technician Certification. The ABRP program I-CAR curriculum (Inter-Industry Conference on Auto Collision Repair) and student textbook uses the ASE

style standards. Students are able to and advised during their course of study to voluntarily challenge at least one of the ASE Certification tests. A student may at anytime during the testing period take an exam as a student. ASE regulations require two years of school, an A.A.S. degree in program upon graduation, and one year of proper work experience. Student must incur all registration and testing fees. Upon completion, a certificate and a certified shoulder emblem patch will be awarded. Technicians who succeed certification must recertify every five years to be current. Both instructors are currently certified as ASE Collision Master Technicians.

Quantitative Data

The fluctuation of our programs number of graduates is a major concern and has been discussed on how to improve in this area. Although the numbers are rising each year in this review period, we will look into and seek suggestions from our counselors, general education faculty and peers. Develop a leaver type of survey to determine the entry-level employment satisfaction of our students.

Course SLO Action Plan

The Auto Body Repair and Paint Program have twenty-three courses ranging from one credit hour to three credit hours per semester. Four semesters, each having twelve credit hours. Currently, we have not completed an assessment of the program or any course SLO's, but have an action plan to accomplish the program assessment, develop and implement the first semester's ABRP 20 series Fall of 2007, second semester's ABRP 30 series Spring of 2008, third semester's ABRP 40 series Fall of 2008 and Spring semester's ABRP 50 series Spring of 2009. The program will integrate our Advisory Board's input into the assessment of the learning outcome.

Facilities Assigned To Program

The Auto Body Repair and Painting Program's number one priority for facilities renovations and repair would be the replacement of our present paint spray booth. The present spray booth is twenty-five (25) years old, out dated and environmentally unfriendly. About four to five years ago, Miles T. Nirei, M.S. Environmental Safety Specialist from University of Hawaii Environmental Health and Safety Office, educated and trained both program instructors on Hazardous Materials Management required by the EHSO Hazardous Materials Management Program and the Chancellor of Community Colleges. Certified both instructors in procedures for handling, storing and disposing of hazardous waste in compliance with Environmental Protection Agency and Hawaii Department of Health regulations. Miles Nerei at that time condemned the paint spray booth for emissions and safety of the students. Miles helped getting a new certified spray booth a reality. A lot of work has gone into the developing process, and at a February 1, 2007 pre-construction meeting with DAGS, General Contractor Isemoto Contracting, Project Engineers, Sub-Contractors, Campus project Coordinator Wilton Watanabe, and the program's instructors, a starting date will take place in early May 2007. The current price tag on the project is about $1,125,000.00 Second priority; would be transforming

the old steam cleaning room into a second year classroom at about $4000. Third priority; fix the lab bay roll up door at $6,000 - $10,000

Inventory/budget

All of the items on the equipment list are very important to the program. Putting a priority on what equipment to replace is very difficult. Some items are very expensive to replace, but is still functional and could be used longer, but have limited capabilities on modern vehicles and will eventually need to be replaced. Some equipment and controlled property endure a lot of use everyday, example, our air compressor, powers majority of all the hand tools and equipment used in the shop by the students, with out this air compressor, everyday activities could not continue. The power shear has the same replacement cost value as the compressor, but would not have the priority like the air compressor. Budget request is asking for replacement of equipment that is not listed on the inventory list, but is requesting to replace equipment in the tool room and lab that is used every day by students, and is listed on pages four to six in this report.

HAWAI`I COMMUNITY COLLEGE AUTO BODY REPAIR & PAINTING PROGRAM REVIEW REPORT

November 13, 2006

Assessment Period: July 1, 2003 to June 30, 2006

Initiator: Clyde Kojiro
Writer(s): Mike Saito
Lloyd Sanborn

Program/ Unit Review at Hawai`i Community College is a shared governance responsibility related to strategic planning and quality assurance. It is an important planning tool for the college budget process. Achievement of Student Learning Outcomes is embedded in this ongoing systematic assessment. Reviewed by a college-wide process, the Program/Unit Reviews are available to the college and community at large to enhance communication and public accountability.

HAWAI`I COMMUNITY COLLEGE
AUTO BODY REPAIR AND PAINT
PROGRAM REVIEW REPORT
November 13, 2006
Assessment Period: July 1, 2003 – June 30 2006

Part I. Report Summary

- Mission
  Our endeavor is to provide the maximum learning opportunity for students to build proficiency in auto body repair and paint technology, current industry collision and paint methodology, related field manual dexterity, and good sound work ethics; in alignment with UHCC's and HawCC mission to serve all segments of our Hawai'i Island community.

- History
  The Hawai'i Community College Auto Body Repair and Painting Program began in 1966 in order to help meet the employment demands of the community. It was housed in a temporary facility located at 1175 Manono Street in Hilo with twelve students and one instructor. Since that time, the program has grown to include two full-time instructors and is housed in a modern facility completed in 1981, located on the University of Hawai'i upper campus. The program is placed in the Applied Technical Education Division of Hawai'i Community College.

  In 2000-2001 the program did major curriculum revisions that included adoption of the Inter-Industry Conference on Auto Collision Repair (I-CAR) curriculum. The purpose of this movement was alignment with all UHCC's auto body and painting programs. Our original 12 credit block curriculum was split into smaller modules that included new alpha numbers, titles, content and credit hours. Upon successful completion of the program requirements, an Associate in Science (A.S.) degree has been changed in 1996 with UHCC system-wide changes, and replaced with the current Associate of Applied Science (A.A.S.) degree, and also offers a Certificate of Achievement (C.A.).

  Thanks to our trade Advisory Committee members and the Auto Body and Painting Association of Hawai'i for graciously purchasing the ICAR curriculum, and input from the community has played a huge part to help broaden the program's content to increase skills required for auto body and paint entry level positions. This new curriculum articulates with the other community college programs and expansion of course content better meet the needs of Hawaii's Island employers and improves the employment opportunities for graduates.

Part II. Program

- **Credentials Offered:**
  Associate in Applied Science (A.A.S.) Degree
  Certificate of Achievement (C.A.)

- **Program Review Period Goals:**
  The specific goals of the program include the skills the program seeks to provide graduates and the occupations for which graduates are prepared. To provide vocational training to allow students to gain knowledge, salable skills, and attitudes that will qualify them for entry-level employment in the auto body repair and painting trade and related occupations. Provide training for knowledge and competencies that will help graduates progress from entry-level work to a higher skill level in their trade. Educate students in the knowledge and skills that will enable them to understand and appreciate their heritage and to be aware of the contributions of different cultures, to exercise good judgment as citizens, and to instill a desire for lifelong learning that will enable them to respond to changing technology. Also serve the community by providing job upgrading opportunities for professionals in the field, and offer modular courses open to majors and non-majors.

  Program Goals – Top three specific goals of the program are:

  -Teach the basic fundamentals of auto body repair and painting, salable skills, and work attitudes that qualify students for entry-level employment in the trade and related occupations.
  -Provide hands-on experience through live projects from inter-department, faculty, staff, student/family and community.
  -Keep abreast of changing technology, and inputting that knowledge into the curriculum and teaching.

  Teach the basic fundamentals of auto body repair and painting, salable skills, good work attitudes, and strive to for 60-80% of its graduates with 100% job placement with entry-level skills or higher, into the auto body collision repair field or related occupations. With the remaining graduates guided to other field of occupations or unrelated decisions.

  Provide students hands-on experience through pseudo projects, from donated body panels and vehicles to meet the competencies needed to do live projects. Team up students into groups of two or three and assign teams various types of live projects. Instructors need to solicit and select a minimum of six to ten live projects annually according to students' skill level from inter-department, faculty, staff, student/family and community.

  Keep abreast of changing technology by attending work shops and seminars offered here, neighbor islands and also on the mainland. Implement that information into the curriculum and teaching. Our equipment inventory shows

many depreciated items which are still useable, and may or may not be feasible to upgrade. We prioritize our equipment needs not by what is good to have and used frequently, but by what is really needed now and used a great deal by students to succeed as entry-level technicians.

- **Program Entry Requirements:**
  The Auto Body Repair and Painting program follows the College's "open door admission" policy for all students entering the program. The program is open to any high school graduate or anyone 18 years of age or older. Students are accepted into the program each fall semester on a first-come, first-served basis. Students are advised to complete the English and math placement testing, for placement into general education courses, to meet program graduation requirements.

- **Faculty and Staff Listings:**
  Mike Saito, Associate Professor, Auto Body Repair and Painting Program, Master Collision Repair/Refinish Technician Certification-National Institute for Automotive Service Excellence (ASE Certification), Inter-Industry Conference on Auto Collision Repair (I-CAR) trained/certified, Hawai'i Register Mechanic License. 1974 University of Hawai'i at Hilo Auto Body Repair and Paint Program A.S. degree graduate.
  Sanford Lloyd Sanborn, Associate Professor, Auto Body Repair and Painting Program, Master Collision Repair/Refinish Technician Certification-National Institute for Automotive Service Excellence (ASE Certification), Inter-Industry Conference on Auto Collision Repair (I-CAR) trained/certified, 1978 University of Hawai'i at Hilo Auto Body Repair and Paint Program A.S. degree graduate.

- **ASE Certification**
  The most important and well-known certification program in the United States is the Automotive Service Excellence Program or ASE Certification. Certification is voluntary and is not required by law. Certification protects the general public and the professional. It assures the general public and the prospective employer that certain minimum standards of performance have been met. Many employers now expect their collision repair and refinishing technicians to be certified. The certified technician is recognized as a professional and usually receives higher pay than one who is not certified. There are five ASE Certification exams in the collision repair area, Painting and Refinishing, Nonstructural Analysis and Damage Repair, Mechanical and Electrical Components, Structural Analysis and Damage Repair, and Damage Analysis and Estimating. Each area will certify the technician as a Certified Technician or after completion of all five areas, receive a Master Technician Certification. The ABRP program I-CAR curriculum (Inter-Industry Conference on Auto Collision Repair) and student textbook uses the ASE style standards. Students are able to and advised during their course of study to voluntarily challenge at least one of the ASE Certification tests. A student may at anytime during the testing period take an exam as a student. ASE regulations require two years of school, an A.A.S. degree in program upon graduation, and

one year of proper work experience. Student must incur all registration and testing fees. Upon completion, a certificate and a certified shoulder emblem patch will be awarded. Technicians who succeed certification must recertify every five years to be current. Both instructors are currently certified as ASE Collision Master Technicians.

- **Description of Facilities: Building 321, Upper Campus, West Kawili Street**

  Classroom
  10 student utility tables
  20 student stack chairs
  18 student tablet arm chairs
  1 instructor desk
  1 wall mounted automatic projection screen
  2 chalk boards, 2 white boards, and bulletin boards
  1 32 inch television
  1 27 inch television
  1 19 inch television
  1 view sonic projector
  1 VHS player
  1 DuPont Chroma vision computer system
  1 DuPont Chroma vision spectrophotometer
  General storage closet w/shelves

  Faculty Office #1
  Instructor desk
  Dell PC Computer
  Toshiba Laptop computer
  Color ink jet printer
  Fax
  1 shared phone line

  Faculty Office #2
  Instructor desk
  Dell PC Computer
  Toshiba Laptop computer
  HP Laser printer
  1 shared phone line

  Tool Room
  Stainless steel counter
  Roll-up steel gate window
  Various tools and equipment:

  Various body hammers, sledge hammers, mechanic hammers, various types of vise grips, pliers, SAE & metric sockets, wrenches, impact wrench, special door hinge wrenches, adjustable wrenches, windshield tools, door panel tools, wiper remover tools, awls, punches, hack saws, jig

saw, rivet gun, plastic rivet installer gun, peel rivet gun, sealer cartridge caulking gun, suction cups, C-clamps, welding helmets, welding jackets, welding gloves, jack stands, floor jacks, slide hammers, pry bars, vacuums, 7" & 5" grinders, drills, orbital sanders, inline sanders, DA sanders, buffer/polishers, battery charger, dent fix dent puller, electrical extension cords, creepers, porter power hydraulic body jacks, heat guns, soldering guns, rubber boots, water hoses.

Lab

9 Bays = 18 work stalls, approx. 24'x 20'
1 In ground hydraulic hoist
1 Above ground twin post electric lift
1 Drive on frame machine
1 Portable frame machine
2 4-Ton floor jacks
2 2-ton floor jacks
1 MO-CLAMP self centering gauge system
1 3-D Combination Universal Laser
1 Set go-jack easy rollers
1 Photometric headlamp aimer
7 110 volt Lincoln MIG welders
2 110 volt Miller MIG welders
1 220 volt Lincoln MIG welder
1 220 volt Solar .030 wire MIG welder
6 Oxyacetylene H/WL outfits
2 Oxyacetylene Y/#2 outfits
1 60 amp Plasma cutter
1 20 amp Plasma cutter
1 220 volt Lenco resistance spot welder
1 Mighty Spot panel resistance spot welder
1 Pro Spot squeeze type resistance spot welder
1 100 amp Lincoln TIG welder
1 Lincoln 185 TIG welder
1 Drill press
1 Manual press
1 Band saw
1 Bench grinder
1 Pedestal 14 inch grinder
8 Work benches
9 Air transfer station w/hose
1 Band saw
1 South Bend Metal Lathe
1 Diarco sheet metal shear
1 Whitney bending brake

Paint Preparation Room
2 Air transfer station w/hose
2 Portable tape machines
1 Wall mounted 36 inch tape machine
1 IRT paint curing system
2 Short wave curing lamp

Paint Area
Spray booth
2 Air transfer station w/hose
Conventional and HVLP spray guns
2 Survival Air oil-less supplied air make-up units
4 3M self contained respirator
2 Heavy duty adjustable work platform
2 Benches-5 feet each

Paint Storage Room
2 Storage cabinets
Storage racks
Designated hazardous waste containment area/shelf
Drum spill containment and ramp
Hazardous spill kit

Paint Mixing/Cleaning Room
DuPont Chroma Base mixing bank
1 Pneumatic paint shaker
1 Paint scale & mixing table
3 Fire proof paint storage cabinets
1 Paint shaker
1 Spray gun cleaner
1 Solvent recycler system
1 Work bench

Main Storage Room
Storage racks
Compressed Gas Cylinder storage closet with racks
- 4 H-Oxygen cylinders
- 7 Y-Argon CO_2 cylinders
- 1 S-Argon cylinder
- 4 W- Acetylene cylinders
- 1 #2-Acetylene cylinder

Compressor Room
1 20-HP Rotary screw compressor
1 7-HP Reciprocating compressor
1 Air drye

Since our curriculum revisions, the program has encountered increasing student enrollment in the fall semester. First and second year students start, break for lunch, and finish the same time. Our facility has only one classroom, which first year students use and spend much time in theory. Second year students are presently lectured in the lab next to the frame repair area or in the paint prep room. Unfavorable conditions such as poor lighting, noise distraction from first year students, auto mechanic shop compressor and lab projects, and deterrent weather are not conducive to learning. Both instructors have agreed to turn our back room into a classroom for second year use.

- **Advisory Board:**
  Five members
  - 2 - Collision shop owners in East Hawai'i
  - Collision shop manager in West Hawai'i
  - Supervisor, Automotive/paint supplier
  - Collision appraiser/adjuster

  Meeting Dates: 06/06/03, 4/27/04, 4/22/05

  Next meeting date: Spring 2007

The Auto Body Repair and Paint Program Advisory Committee has been invaluable to the students, instructors and the program. Their generosity to the ICAR curriculum has helped the program's curriculum to be made into modules. Two of our advisory members are former graduates of the program and along with the other members, hire our students into the workforce. Our advisory members keep the instructors abreast of new technology and training. Has made donation of equipment, supplies and materials, and contributed as guest lectures and shared new ideas and suggestions that have been implemented successfully to our courses. Their insightful feedback has been of immeasurable assistance to the program.

Part III. Quantitative Trend Data Table – 1 page, sent by the Institutional Researcher

QUANTITATIVE TREND DATA CHART(as of 10-19-06)

	Fall 2003	Spring 2004	AY	Fall 2004	Spring 2005	AY	Fall 2005	Spring 2006	AY
#1 Number of Unduplicated Majors	32	20	32	37	33	37	38	32	40
#2 Total Student Semester Hours	384	251	635	510	393	903	398	334	732
#3 FTE Student Majors	25.60	16.73	21.17	34.00	26.20	30.10	26.53	22.27	24.40
#4 Number of Graduates			4			9			9
#5 Number of classes	12	11	23	12	11	23	12	11	23
#6 Avg Class size	15.00	8.73	12.00	16.58	14.45	15.57	16.08	12.91	14.57
#7 Avg Class fit	83.3%	48.5%	66.7%	92.1%	80.3%	86.5%	89.4%	71.7%	80.9%
#8 FTE of BOR Appointed Program Faculty			2			2			2
#9 Number of FTE Faculty based on contact hours (FTE = 21)			2.29			2.29			2.29
#10 Student semester hours for all PPC class enrollments	336	200	536	396	324	720	349	286	635
#11 Student-Faculty Ratio			5.21			7.00			6.17
#12 PPC Credits Earned Ratio	.93	1.00	.96	1.00	.96	.98	.90	.91	.90
#13 Non-PPC Credits Earned Ratio	.71	1.00	.86	1.00	.67	.83	.43	.47	.45
#14 PPC Avg GPA	2.45	2.42	2.43	2.36	2.22	2.29	2.13	2.23	2.18
#15 Non-PPC Avg GPA	2.20	3.00	2.60	2.56	2.00	2.28	1.21	1.53	1.37
#16 Budget			$7,692.93			$7,411.86			$11,507.38
#17 College Cost per SSH			$167.59			$120.64			$162.50
#18 Grant Cost per SSH			$13.06			$19.83			$2.05

Part IV. Quantitative Data Analysis

The above data chart indicates that the Auto Body Repair and Paint Program has made significant gains in the areas of essence including items #1, Number of Unduplicated Majors, #2, Total Student Semester Hours, and #3, FTE Student Majors.

Item #4, Number of Graduates is a major concern and has been discussed at length on how to improve in this area. Although the numbers are rising each year in this review period, we are looking into this dilemma and seeking suggestions from our counselors.

Items #6, Average Class Size, and item #7, Average Class Fit, have improved considerably for this review period and hopefully continue to rise in the next review period.

Items #5, Number of Classes, and item #8, FTE of BOR Appointed Program Faculty, and item #9 Number of FTE Faculty Based on contact hours (FTE=21) are a constant and should not change in the near future.

Item #10, Student Semester Hours for all PPC class Enrollments, have improved in this review period, while, Item #11, Student-Faculty Ratio will hopefully rise before the next review. Item #12, PPC Credits Earned Ratio and #14, PPC Average GPA, will try to maintain a higher average as the program instructors improve and modify the curriculum further. Items #16, Budget, item #17, College Cost per SSH, and item #18, Grant Cost per SSH illustrate a thriving and healthy program with room to grow and develop.

In addressing the budget, the data chart shows an increasing budget but a decreasing college cost per SSH indicating monies well spent.

The fluctuation of our programs number of graduates is a major concern and has been discussed on how to improve in this area. Although the numbers are rising each year in this review period, we will look into and seek suggestions from our counselors, general education faculty and peers. Develop a leaver type of survey to determine the entry-level employment satisfaction of our students.

Part V. Other Data

The Auto Body Repair and Paint Program use the Applied Technical Education Division standard evaluation forms for course evaluation. We have discussed various ways to initiate student satisfaction surveys for the program and are now carefully determining questions and outcomes of the survey.

The instructors have sent out students for employment to various firms within the community and have required them to register with the Corporative Vocational Education program. CVE program has a student evaluation form the employer/supervisor fills out and returns to the CVE coordinator. The instructors also keep in close contact with the students and their employer/supervisor.

Auto Body Repair and Paint program is required to submit Program Health Indicator reports to the system level because of Perkins monies received. The report includes data and narratives to justify monies or equipment procured including:

Program Demand/Centrality-Student enrollment, SSH, and classes taught.
Program Efficiency-Average class size, SSH per Faculty, class size.
Program Outcomes-Credits earned ratio, Graduation, Employment.
Plan of Action-Ideas, changes, for the next PHI.

For this Program Review period, the Auto Body Repair and Paint Program was rated a healthy program in all aspects of the indicators and a notable factor for all CTE programs are the employment rate. We have had employment offers from various collision repair shops, dealership firms, glass shops, auto detail shops, parts and paint supply venders, salvage parts dealers, hotel maintenance dept., construction companies asking for our graduates to apply to respective firms. Any student wanting to work had an opportunity. The program could not fill all the employment offers that were available.

Part VI. Program SLO's

Program SLO's

- Demonstrate entry-level skills for accuracy in structural repairs, non-structural repairs, painting theory, plastic repair and plastic refinishing.

- Demonstrate competence in safe & proper work attitude, identification of hand tools, power tools, the characteristics of various welding and cutting techniques applied on current types of metals used on OEM replacement parts, metal straightening techniques, rust repair solutions, and corrosion protection.

- Demonstrate competence in proper safety procedures & practices for automotive refinishing, operation of OSHA, HIOSH, Right-To-Know Act, EPA laws & regulations, refinish equipment, application of color, matching, problems, blending, plastic repair and refinishing.

- Demonstrate competence in collision damage appraisal, panel removal & alignment, door & quarter panel replacement, movable & stationary glass service, and electrical components.

- Demonstrate competence in structural damage analysis, straightening, & replacement panels, steering & suspension systems, heating & cooling systems

- Demonstrate computation, communication, critical thinking, research, and problem solving skills as well as an appreciation for the diversity of cultures, community, and the environment.

Take pride in the quality of projects and performance; possess responsible work ethics and standards, and model attitudes of professionalism and appearance.

The Auto Body Repair and Paint Program is part of the Transportation Trades Department in the Applied Technical Education Division. The Auto Body Repair and Paint Program use panels and models for students to practice their competence in hands on learning, and live community shop projects that are used as an assessment tool. Students make an estimated assessment of the project and budget supplies and materials for completion of the project that must satisfy customer and instructor expectation.

The program SLO's were developed last Spring 2005 and are being implemented this Fall 2006. We have introduced them to the second year students and have will revise our syllabus for the incoming first year students.

**See attached electronic file (Program Review SLO)

Part VII. Course SLO's

The Auto Body Repair and Paint Program have twenty-three courses ranging from one credit hour to three credit hours per semester. Four semesters of twelve credit hours

Currently, we have not completed any course SLO's but are working on them. We anticipate completing the entire course SLO's before the end of Spring 2007 and implementing them in Fall 2007.

Course SLO Action Plan
The Auto Body Repair and Paint Program have twenty-three courses ranging from one credit hour to three credit hours per semester. Four semesters, each having twelve credit hours. Currently, we have not completed an assessment of the program or any course SLO's, but have an action plan to accomplish the program assessment, develop and implement the first semester's ABRP 20 series Fall of 2007, second semester's ABRP 30 series Spring of 2008, third semester's ABRP 40 series Fall of 2008 and Spring semester's ABRP 50 series Spring of 2009. The program will integrate our Advisory Board's input into the assessment of the learning outcome.

NAME _____ SEMESTER/YEAR BEGAN ABRP _____

HAWAII COMMUNITY COLLEGE, 2006-2007
Auto Body Repair and Painting (ABRP)

Program Requirements (CA Overall [42 credits, cumulative GPA 2.0 required from all courses])
(AAS Overall [63 credits, cumulative GPA 2.0 required from all courses])

Course	Course Name	Semester, Year & Grade	CA Credits	AAS Credits
FALL:				
ABRP 20	Introduction to Auto Body Repair & Painting		1	1
ABRP 21	Oxyacetylene Welding & Cutting		2	2
ABRP 22	Gas Metal Arc Welding Techniques		3	3
ABRP 23	Advanced Welding Techniques		1	1
ABRP 24	Rust Repair & Corrosion Protection		2	2
ABRP 25	Metal Straightening Techniques		3	3
SPRING:				
ABRP 30	Preparation & Refinish Safety		3	3
ABRP 31	Refinish Equipment & Preparation		1	1
ABRP 32	Refinish Application & Color Matching		2	2
ABRP 33	Paint Problems		2	2
ABRP 34	Color Blending		3	3
ABRP 35	Plastic Repairing & Refinishing		1	1
FALL:				
ABRP 40	Collision Damage Appraisal		2	2
ABRP 41	Panel Replacement & Alignment		3	3
ABRP 42	Door and Quarter Panel Replacement		3	3
ABRP 43	Movable Glass Service		2	2
ABRP 44	Windshield & Stationary Glass Repairs		1	1
ABRP 45	Servicing Electrical Components		1	1
SPRING:				
ABRP 50	Structural Damage Analysis		---	3
ABRP 51	Straightening Structural Components		---	3
ABRP 52	Structural Replacement		---	3
ABRP 53	Steering and Suspension		---	2
ABRP 54	Heating and Cooling Systems		---	1
ABRP 93V (Optional)	Cooperative Vocational Education		1-3	1-3
Eng 21 or higher OR Eng 22/ESL 15 or higher	Developmental Reading / Introduction to Expository Writing		3	3
Math 50 or higher	Technical Mathematics I		3	3

1. Cultural Environment Elective [1 COURSE REQUIRED, 3 cr.] **ART** 101, 105B, 105C, 107, 108, 111, 112, 113, 114, 115, 123, 125, 126, 202, 207, 211, 212, 217, 223, 227, 230, 238, 239, 243, 244, 269C, 294, **ASAN** 120†, 121†, 122†, **DNCE** 153, 185, 256†, 285, **ED** 256† (see DNCE 256), **ENG** 103, 204, 255, 256, 257A, 257E, **HAW** 101, 102, 103, 201, 202, **HIST** 123, 151, 152, 153, 154, 241, 242, 281, 282, 284, 288, **HUM** 100, 160† (see SSCI 160), 275, **HWST** 107, 123, 124, 125, 126, 128, 129, 130, 131, 160, 161, 205, 221†, 224, 231, 232, 235, 241, 242, 250, 251, 260, 261, 270, **IS** 55, **JPNS** 101, 102, 121, 122, **LING** 102,. 121†, **PHIL** 100, 101, 102, 120, 200, 201, 211, 255, **PSY** 275, **REL** 150, 151, 152, 153, **SPCO** 231, 251		—	3
2. Natural Environment Elective [1 COURSE REQUIRED, 3 cr.] **AG** 54B, 122, 141, 175-175L, 200, 250, 260, **ASTR** 110, **BIOC** 241, **BIOL** 100-100L, 101-101L, 141-141L, 142-142L, 156-156L, **BOT** 101-101L, 130-130L, **CHEM** 100-100L, 151-151L, **FSHN** 185, **GEOG** 101-101L, 122, 170-170L, 180-180L, **GG** 101-101L, **ICS** 100, **MICR** 130-130L, **OCN** 201, 205, **PHRM** 203, **PHYS** 25, 50, 55, 56, 100-100L, **SCI** 20, 51, 124-124L, 222, **ZOOL** 101-101L		—	3
3. Social Environment Elective [1 COURSE REQUIRED, 3 cr.] **AJ** 101, 180, 210, 280, 290B, 290C, 290D, **ANTH** 121, 150, 200, **ASAN** 120†, 121†, 122†, **BUS** 71, **ECON** 20, 50, 120, 130, 131, **ED** 105, 131, **FAMR** 230, **GEOG** 102, **HD** 234, **HSER** 110,140, 245, 248† (see SUBS 248), **HWST** 221†, **LAW** 30, **MGT** 20, 24, **POLS** 110, **PSY** 100, 170, 214, 230, 275, **SOC** 100, 208, 218, 251, 289, 290, **SPCO** 51, 130, 151, 260, **SSCI** 25, 45, 60, 111, 150, 160† (see HUM 160), 250, **SUBS** 248† (see HSER 248), 268, 270, 275, **WS** 151		—	3
	Total Credits:	42	63

Courses completed that do not apply to major

Course	Sem., Yr. & Grade	Course	Sem., Yr. & Grade

†These courses are cross-listed but will only count once for graduation requirements.

Part VIII. Program Summary

The Auto Body Repair and Paint Program developed our mission statement as stated on page 2 of this report, after Hawaii Community College mission, vision, and imperatives were developed. We tried to align with the UHCC's mission and Hawaii C.C.'s mission as much as possible but realized that our mission statement might need to be changed or a slight adjustment will be needed to closer align with the college.

The college's ADP was developed some years ago and much of the contents are out dated and unusable. Technology, curriculum, and equipment are the focus of the program right now.

The Auto Body Repair and Paint Program has not completed a Program Review since around 1987, therefore, goals and missions will have to begin now and be analyzed annually.

All CTE Programs are required to submit Program Health Indicator (PHI) reports to the Federal Perkins Administrator on Oahu as to the "health" of the program. For the past three years Auto Body Repair and Paint Program has gained a healthy standing and thriving.

New curriculum, equipment, technology, and the changing of the building's roof in summer 2005, we believe have changed the Auto Body Repair and Paint program for the better. Equipment and technology is the driving force for our program. Industry demand our students be entry level equipped. Knowledge of the latest equipment used in industry. Over this review period our program acquired through Perkins funding, two Toshiba Satellite lap top computers, one Genesis scan tool, one Lincoln Precision TIG 185 welder, one ProSpot squeeze type resistance spot welder. These equipment coincide with our curriculum. Changing of the really bad leaky roof has changed the program around.

Facilities are surely not the enticement that attracts students to our program. We deal with a leaky AC unit in the classroom, and a serious leaky roof for years which caused damage to literature material, walls (paint peeling), and light fixtures rusting and falling from the ceiling or beams, equipment, projects, student's tool chests and tools. Instructors in the past would have to dismiss class because of safety issues. Damage to equipment and projects has caused lost of moral in students. Our Frame machines are still usable but are out dated to be use on current unitized construction vehicles (2000 or newer). The program uses audio visual videos, internet solutions into the classroom, and visits to collision repair shops. Classroom space availability for the second year students would undoubtedly enhance the students

The top three program strengths during this review period are:

- New restructured curriculum articulated with Honolulu, Maui, and Kauai C.C.
- Employment opportunities in the collision field and related areas of employment.
- Knowledgeable and caring instructors with community links locally and state wide.

The three main Program Weaknesses during this review period

- Graduation rate of program needs serious reflection.
- Facilities need to turn a work station into a classroom for second year.
- Replacement of obsolete equipment (spray booth)

Action Plan Tasks	Year	Responsible Party
Examine and increase the graduation rate	2007	S. Lloyd Sanborn Mike Saito
Continue developing course SLO's and Assessment strategies	2007	S. Lloyd Sanborn Mike Saito
Work with facilities/Auxiliary Service on classroom possibilities	2007	S. Lloyd Sanborn Mike Saito
Replace condemned spray booth with new down draft spray booth	2007-2008	Miles Nirei S. Lloyd Sanborn Mike Saito

Part IX. Budget Implications

The ABRP program utilizes its current resources to sustain the program's daily needs throughout the academic year.

Purchase when possible, items from government surplus
Recycle donated parts and vehicles as practice projects
Live projects
Donated vehicles from community and dealerships
Donated body panels and vehicles from Auto Mechanic program
Donated good useable damaged parts form local collision shops
Donated parts from vendors
Donated materials from vendors
Donated equipment from local industry shops
Student explorations at various industry shops

The following are required for the program to continue maintaining, improving and meeting its goals through the next review period:

For the program to meet its goals over the next review period. The instructors search and keep abreast of industry changes. Fall 2004, one instructor from the program attended the NACE – National Auto Collision Exposition and SEMA - in Las Vegas. Fall of 2005, both instructors attended along with 10 students from the graduating class. The information and experience is incorporated into our curriculum.

Replace out of date and worn small equipment such as projector, HVLP paint spray equipment, air grinders, sanders, drills and die grinders

CHART 1: FACILITIES ASSIGNED TO PROGRAM

The Auto Body Repair and Painting Program's number one priority for facilities renovations and repair would be the replacement of our present paint spray booth. The present spray booth is twenty-five (25) years old, out dated and environmentally unfriendly. About four to five years ago, Miles T. Nirei, M.S. Environmental Safety Specialist from University of Hawaii Environmental Health and Safety Office, educated and trained both program instructors on Hazardous Materials Management required by the EHSO Hazardous Materials Management Program and the Chancellor of Community Colleges. Certified both instructors in procedures for handling, storing and disposing of hazardous waste in compliance with Environmental Protection Agency and Hawaii Department of Health regulations. Miles Nerei at that time condemned the paint spray booth for emissions and safety of the students. Miles helped getting a new certified spray booth a reality. A lot of work has gone into the developing process, and at a February 1, 2007 pre-construction meeting with DAGS, General Contractor Isemoto Contracting, Project Engineers, Sub-Contractors, Campus project Coordinator Wilton Watanabe, and the program's instructors, a starting date will take place in early May 2007. The current price tag on the project is about $1,125,000.00
Second priority; would be transforming the old steam cleaning room into a second year classroom at about $4000.
Third priority; fix the lab bay roll up door at $6,000 - $10,000

List Bdng/Rm/Lab/Shop	Describe Renovation/Repair Needed	Estimated Cost
Building 321/201 Existing Collision Repair Systems	-remove and disassemble both frame repair systems -relocate frame systems to old paint spray area -reassemble, secure and level frame system -remove in ground hoist, dispose and resurface floor	$1,125,000
Building 321/201 Old Condemned Spray Booth and Paint Prep Room	-remove electrical from spray booth -remove compressed air lines from spray booth -remove SAS air supply system from spray booth -remove water pipe line and spray booth floor drain -disassemble and dispose of old condemned spray booth -level existing spray booth floor -level existing paint prep room floor -install ceiling light fixtures in old spray booth area -install welding plug outlet, upgrade electrical outlets	
Building 321/201 Spray Booth, Prep Station, and Adjoining Paint Mixing and Storage Room	-painting system to be located in old collision repair area -erect new down draft spray booth -erect paint prep station -erect adjoining paint mixing and storage room to booth	

	-install electrical light fixtures -install free air supply system -install self contained compressed air supply system -relocate and set-up paint mixing bank, scales, paint recyclers, gun washers, and paint safe storage	
Building 321/201 Old Steam Cleaning Room turned into Second Year Class Room	-remove present equipment -repaint ceiling and walls -install internet cable -install air conditioning system	$4,000
Building 321/201 Lab Bay Roll Up Door	-replace broken 20 foot wide roll up door (broken more than six years, two repair stalls are dead space)	$6,000-10,000

CHART 2: INVENTORY LIST: EQUIPMENT and CONTROLED PROPERTY

Program Assigned Equipment (E) and Controlled Property (CP) (List in order of chronological depreciation date	Category E = item value> Than $5K CP = item value $1K - $5K	Expected Depreciation Date	Estimated Replacement Cost
(1982) Whitney Frame Alignment System	E	1992	$75,000.00
(1982) Whitney 614 Brake Bending	E	1992	$7,000.00
(1982) South Bend 10 inch Metal Lathe	E	1992	$15,000.00
(1982) Kar Grabber Repair System	E	1992	$20,000.00
(1982) Diarco Power Shear	E	1992	$8,500.00
(1986) Glas Craft System Spray Up	E	1996	$5,500.00
(1994) Sullair Air Compressor	E	2004	$8,500.00
(1999) Lincoln Squarewave TIG Welder	CP	2007	$4,500.00
(1999) 3-D Combination Universal Laser	CP	2009	$4,800.00
(2000) Uni-Ram Solvent Recycle System	CP	2005	$4,500.00
(2000) Solar MIG Welder W/Cart	CP	2008	$2,300.00
(2002) DuPont Chroma Vision	E	2007	$7,250.00
(2002) DuPont Mini Colornet	CP	2007	$4,700.00
(2002) Dedpes 88 Mixer Base	CP	2012	$1,600.00
(2002) Sartorius Scale	CP	2012	$1,800.00
92002) IRT 302 Paint Cure System	CP	2010	$4,600.00
(2002) Dell Optiplex GX240 Computer	CP	2007	$1,500.00
(2002) Dell Optiplex GX240 Computer	CP	2007	$1,500.00
(2002) 3M Self	CP	2009	$1,200.00

Contained Respirator			
(2002) 3M Self Contained Respirator	CP	2009	$1,200.00
(2002) 3M Self Contained Respirator	CP	2009	$1,200.00
(2002) 3M Self Contained Respirator	CP	2009	$1,200.00
(2002) Viewsonic Projector	CP	2008	$2,500.00
(2004) Toshiba Satellite A40 Lap Top Computer	CP	2008	$1,400.00
(2004) Toshiba Satellite A40 Lap Top Computer	CP	2008	$1,400.00
(2004) Genesis Scan Tool	CP	2008	$3,000.00
(2005) Pro Spot Squeeze Type Resistance Spot Welder	E	2013	$16,000.00
(2005) Lincoln Precision TIG 185 Ready Pak Welder	CP	2013	$2,900.00

CHART 3: BUDGET REQUEST

All of the items on the equipment list are very important to the program. Putting a priority on what equipment to replace is very difficult. Some items are very expensive to replace, but is still functional and could be used longer, but have limited capabilities on modern vehicles and will eventually need to be replaced. Some equipment and controlled property endure a lot of use everyday, example, our air compressor, powers majority of all the hand tools and equipment used in the shop by the students, with out this air compressor, everyday activities could not continue. The power shear has the same replacement cost value as the compressor, but would not have the priority like the air compressor. Budget request is asking for replacement of equipment that is not listed on the inventory list, but is requesting to replace equipment in the tool room and lab that is used every day by students, and is listed on pages four to six in this report.

Describe Item $25K line item	Biennium Request First Yr.	Biennium Request Second Yr.	Reallocation of Funds and/or Position	X Amt. Line Item
Air Compressor		$8,500.00		1
Air Dryer Unit		$2,500.00		1
MIG Welder		$9,500.00		5
Aluminum MIG Welder		$2,500.00		1
HVLP Paint Spray Gun	$4,200.00			6

5” Air Grinders	$1,800.00			10
DA Sanders	$2,100.00			10
R/F Air Drills	$1,800.00			10
Angle Die Grinder	$1,600.00			10
Projector		$2,500.00		1
Air Conditioner System	$4,500.00			1