Program Description

As the University of Hawaii Maui College continues to emphasize the thought of being a learning-centered institution, the Auto Body Repair and Painting Program (ABRP Program) continues to align itself with the concepts of a learning-centered institution and has also incorporated the concept of a lifelong learner into the program curriculum.

The ABRP Program also agrees to the open admissions policy of the University of Hawaii Maui College campus, allowing students to enter in to the program in either semester. Students also have the opportunity to enter into either of the two distinctive areas of the trade, but are still required to receive instruction and hands-on training in all areas of instruction of the ABRP Program for a degree. This insures all students are able to gain the different types of knowledge and skills as required by either the auto collision repair or auto refinish repair areas of the trade.

Also by providing the ABRP Program in a self-paced module format three areas of student demand are fulfilled. First, the self-paced module format allows for the needs of students striving to obtain gainful employment in the trade to be met. Next, for students looking to improve their skills in specific areas of the trade are satisfied, and finally students enrolled for self- knowledge also have their needs fulfilled. Instruction in the ABRP Program for all three types of students can be accomplished at the same time. All students receive the same instruction and must meet the criteria of the students enrolled in the program for employment into the trade. The ABRP Program continues to strive to provide instruction in the most current repair and refinish technology to all students.

The module system also provides different avenues for individuals, they can enroll either as full-time or part-time students to receive instruction in the ABRP Program, with the ultimate goal of receiving either their Associate in Applied Science Degree (AAS) or a Certificate of Achievement Degree (CA).

The first avenue, students can actively pursue a degree or a certificate as fulltime students. Upon completion all students exiting the program with an AAS Degree or a CA Degree should be able to satisfactorily perform their expected and required tasks at entry level or higher in the Auto Body and Refinishing trade.

Next, this program also provides for individuals who are currently employed in the Automotive Collision and Corrosion Repair or Automotive Refinishing industry a way to attend UHMC as part-time students. The ABRP Program is able to present these students with in-service training as Auto Collision Technicians, Auto Corrosion Technicians, and Auto Refinishing Technicians, because of the self-paced modules. This in-service training allows the technician to use the UHMC ABRP Program in several ways. First, this program can be utilized as a refresher course, thus allowing the technician to be able to perform their daily work assignments more efficiently. Second, technicians can enroll in the Auto Body Repair and Painting Program for advancement in their specialized area of the trade. Another, to cross train into

another field of the auto collision or refinish industry, such as a collision repair technician enrolling to learn about being able to do or understand complete refinishing or touch up refinishing procedures.

Part I. Quantitative Indicators

Overall Program Health: Cautionary

Majors Included: ABRP

Demand Indicators	Program Year 09-10	10-11	11-12	Demand Health Call
1New & Replacement Positions (State)	21	20	26	
2*New & Replacement Positions (County Prorated)	3	2	3	
3*Number of Majors	27	31	32	
4SSH Program Majors in Program Classes	271	256	264	Unhealthy
5SSH Non-Majors in Program Classes	99	146	126	
6SSH in All Program Classes	370	402	390	
7FTE Enrollment in Program Classes	12	13	13	
8Total Number of Classes Taught	12	10	10	

Efficiency Indicators	Program Year 09-10	10-11	11-12	Efficiency Health Call
9 Average Class Size	15.5	20.1	19.5	
10 *Fill Rate	100%	100%	100%	
11 FTE BOR Appointed Faculty	1	1	1	
12 *Majors to FTE BOR Appointed Faculty	27	30.5	32	
13 Majors to Analytic FTE Faculty	33.1	41.2	43.2	
13aAnalytic FTE Faculty	0.8	0.7	0.7	
14 Overall Program Budget Allocation	$71,646	$70,856	Not Yet Reported	
14aGeneral Funded Budget Allocation	$71,646	$70,027	Not Yet Reported	Healthy
14bSpecial/Federal Budget Allocation	$0	$0	Not Yet Reported	
14cTuition and Fees	$0	$0	Not Yet Reported	
15 Cost per SSH	$194	$176	Not Yet Reported	
16 Number of Low-Enrolled (<10) Classes	2	0	0	

Effectiveness Indicators	Program Year 09-10	10-11	11-12	Effectiveness Health Call
17 Successful Completion (Equivalent C or Higher)	60%	53%	57%	
18 Withdrawals (Grade = W)	6	10	11	
19 *Persistence (Fall to Spring)	60%	81%	63%	
20 *Unduplicated Degrees/Certificates Awarded	3	3	8	
20a Degrees Awarded	2	1	2	
20b Certificates of Achievement Awarded	0	1	0	
20c Advanced Professional Certificates Awarded	0	0	0	Cautionary
20d Other Certificates Awarded	2	4	7	
21 External Licensing Exams Passed	Not Reported	Not Reported	N/A	
22 Transfers to UH 4-yr	0	0	0	
22a Transfers with credential from program	0	0	0	
22b Transfers without credential from program	0	0	0	

Distance Education: Completely On-line Classes	Program Year 09-10	10-11	11-12
23 Number of Distance Education Classes Taught	0	0	0
24 Enrollment Distance Education Classes	0	0	0
25 Fill Rate	0%	0%	0%
26 Successful Completion (Equivalent C or Higher)	0%	0%	0%
27 Withdrawals (Grade = W)	0	0	0
28 Persistence (Fall to Spring Not Limited to Distance Education)	0%	0%	0%

Perkins IV Core Indicators 2010-2011	Goal	Actual	Met
291 P1 Technical Skills Attainment	90.10	83.33	Not Met
302 P1 Completion	45.00	33.33	Not Met
313 P1 Student Retention or Transfer	56.00	82.35	Met
324 P1 Student Placement	51.00	100.00	Met
335 P1 Nontraditional Participation	16.25	6.67	Not Met
345 P2 Nontraditional Completion	15.15	0.00	Not Met

Part II. Analysis of the Program

Historically the number of available positions listed for the County of Maui, which includes Molokai and Lanai, has always appeared low in the demand indicator section, even though the auto collision and refinishing trade here in the County of Maui

has always contacted the ABRP Program seeking skilled or semi-skilled technicians. Every semester over the past five years, an average of three body repair and refinish shops or related business contact the UHMC ABRP Program for both new students for part-time employment and advanced or second year students for full-time employment. A preference for students nearing graduation from the ABRP program is often requested, as employers offer full-time positions for employment as either collision/corrosion technicians or refinish technicians or a related trade. Also, with the economic situation for the past few years, many shops had to hire additional part-time employees to accommodate the increase in demands by customers wanting to repair their older cars to be able to operate for a few extra years. So the open positions statistics number here on Maui may not be an accurate account of available jobs at any given time. In addition, many of our students receive employment not only at a body and refinish shop, but also find employment at a related businesses, such as a glass repair facility, new auto parts stores and outlets, recycled auto parts facilities, or an automotive paint supply store. The UHMC ABRP Program has always been able to fulfill the requests of the auto collision and refinish industry, as well as other related businesses in Maui County.

While the ABRP Program has been able to maintain its enrollments, the program majors enrolled in the APRP Program has been not a strong point for this program. By offering the curriculum in a self-paced module format, the program is able to fulfill the specific needs of each individual student. Because instruction on auto collision, corrosion and refinishing is provided in the self-paced format; many students enroll as part-time students for several reasons and it is these students that often choose to not declare themselves as majors in the ABRP Program. First, there are students are just feeling out the trade to see if they would like to pursue this as a career, so they would enroll in only several the beginning modules. Next, the self-paced module format fills the needs of students striving to obtain skills for entry-level employment in the trade with no desire in receiving their Certificates of Completion, Certificates of Achievement and/or an Associate in Applied Science Degree. Third, students that are currently employed in the trade or a related trade, enrolling in a class or two only to improve their knowledge and level of proficiency in the trade. Finally there are students enrolling for self- knowledge seeking only to have their immediate needs fulfilled. In my conversation with these students, they stated that they would prefer not declare themselves as majors in the program, as they believed it would require a commitment from them to eventually enroll full-time and also to complete all the required courses for a degree seeking student just to remain in the program. Most full-time students enrolled in the program usually declare themselves as majors in the program as they are working towards receiving their certificates and degrees from the program.

With the economic downturn during the past few years, many students who would have returned as full-time students, they are now returning as part-time students. This allows them to work longer hours at their places of employment or they have found other additional employment to supplement their family incomes. Also many students that were working part-time were encouraged by their employers to work full-time hours. In turn, the students are now unable to maintain a full-time class schedule. Not only were majors lost, but also non-majors.

Persistence of program majors from the fall semester into the spring semester is usually at 50% or near it. With the implementation of IICAR curriculum to the program

over the past five semesters as a part of the ABRP Program's action plan, student participation in classroom and laboratory exercises and activities have seen an improvement for the past three years.

The UHMC ABRP program previously had successfully met its goals in three areas, 1P1 Technical Skills Attainment, 3P1 Student Retention or Transfer, and 4P1 Student Placement prior. But fell short of goals in the other three areas: 2P1 Completion, 5P1 Nontraditional Participation, and 5P2 Nontraditional Completion. Since then the UHMC ABRP program has dropped in the 1P1 Technical Skills Attainment indicator. It is possible that the implementation of the IICAR based curriculum package has had an effect because of the higher level of information presented to the students that have completed the basic courses and were enrolled in the advance courses. The 1P1 Technical Skills Attainment indicator should improve as the incoming students are receiving more of the IICAR based curriculum in their basic course offerings.

As noted in past program reviews, there are several factors that may cause the completion rate of students not to be met in the Perkins 2P1 indicator. First, many of the younger students entering the program unprepared financially because they were under the impression that this is like high school where everything is provided for them and only need to show up for class and they will be passed. Then they find out that there is "book work" to be done and the cost of the textbook and workbook. They are now not able to complete any of their academic activities and they suddenly disappear. Also, many students are financially unprepared to obtain the tools required to progress in the program. Students without the required tools try to borrow from other students, but because the students that have the tools are reluctant to share because they are using their tools to complete their laboratory assignments and the student without their tools fall behind and then stop coming to class.

Next, there are students enrolled in the ABRP program seek basic training as either body technicians or refinish technicians, and leave after achieving their goals, without continuing and graduating from the program. Then, occasionally there are students that are already employed and enroll only in certain classes for advancement in the auto body and refinish trade at their place of employment.

Thus, if these last two groups of students have fulfilled their goals and choose to exit the program after the first or second semester without receiving a degree or certificate, they would show up negatively in the data and this does not reveal that the student completed what they wanted to learn.

As for the Perkins 5P1 and Perkins 5P2 core indicators, there have been several nontraditional students enrolled in the UHMC ABRP Program, but they did not continue on to complete the program. These students have either encountered personal, financial, and academic situations that they could not cope with and dropped out unofficially and officially. But there have been nontraditional students enrolled in the UHMC ABRP Program that have completed the program and received their certificates and degrees.

Part III. Action Plan

Retention of students is always the main issue for the ABRP Program. Due to health issues of the instructor for the ABRP Program in the 2009-10 year the college hired a lecturer to help with of students. At this time it became obvious the student

retention increased as more students returned the following semester. And with increased enrollments in the 2010-11 year, the college again hired a lecturer for two class sessions to help with the over load of students. The lecturer assists with the students in the laboratory, while the instructor handled the classroom portion. I believe that by having two instructors, one in the laboratory and one in the classroom is what produced an increase in the persistence rate for returning students. This was in part because both instructors were able to provide more one-on-one support needed, instead of one instructor being stretched thin with up to 20 beginning and advanced students, with each student doing a different task or assignment in either the laboratory or classroom.

Having one instructor teaching and evaluating the students while they are actively participating in laboratory exercises and another instructor helping the students with their classroom activities, with both instructors grading each student practical and written assignments. An alternative would be to have one instructor for the first year students and another for the second year students. I believe either system will work, but the latter being a better choice as each instructor then can spend more time with his specific group of students. Particularly, for the first year students that require much more guidance and encouragement to remain in and to complete the program. This could possibly be the step to place the program in the right direction in dealing with the issue of student retention as well as dealing with the high enrollments the ABRP Program has encountered these past years.

Another idea for program enhancement that has been tossed about with members of the ABRP Advisory Committee members is to incorporate more computer skills related assignments. Employing IICAR computer instruction for auto body repair and refinishing. Another major project for the ABRP Program is having the capabilities to allow students to be able to take their test and quizzes on line, using campus resources such as Laulima.

Part IV. Resource Implications

With the anticipated enforcement of EPA mandates for automotive refinishing Volatile Organic Compound (VOC) limits, the refinishing industry is going to water based refinishing products. This requires the refinishing equipment employed in the application of refinishing materials will require updating and replacement within the next year or two. The existing application equipment will suffice only for short-term use with the application of water-borne materials.

Continue to explore obtain funding for an additional faculty member or a full-time lecturer. As stated in previous sections, one instructor to provide instruction and supervision in the laboratory, while the another instructor is in the classroom working with students, or one instructor for the first year students and one for the second year students. Either option is workable to enhance student retention and improve completion/graduation rates.

Program Student Learning Outcomes

1. Explain and describe both personal and public health and safety issues as it pertains to the products used in the auto collision repair and auto refinishing

industry. Describe in general the effect of these products have on themselves, co-workers and the environment. Demonstrate proper personal and public safety precautions to be utilized when using these products. Will be able to identify hazardous products and describe the proper methods of disposal for different types of hazardous waste.

2. Describe and demonstrate proper and safe usage as pertaining to the hand and power tools and equipment needed to complete the required tasks for auto body sheet metal repair for the return both exterior and interior sheet metal of a vehicle to a like new condition.
3. Employ required math and reading skills to be able to complete vehicle repairs as described from a work order and also written specifications when using vehicle service information or a vehicle dimensioning manual, obtained either as a hard copy or on line. Be able to communicate both written and verbally with fellow employees and other shop personnel.
4. Demonstrate the proper MIG and resistance spot welding skills required to achieve a weld that is equal to factory specifications for a given type of repair, in a safe manner. Be able to identify and correct MIG and resistance spot welds that are not compliant with factory recommendations for acceptable repairs.
5. Display the appropriate refinishing skills required to achieve a vehicle topcoat (finish) that is equal to factory refinishing specifications. Describe the health and safety issues surrounding the use and disposal of refinishing and related materials. Be able to identify and correct paint imperfections in the topcoat to meet factory recommendations for an acceptable finish. Also, describe and demonstrate proper and safe usage as pertaining to the hand and power tools and refinishing tools and equipment employed when refinishing a vehicle, both touch-up repair and complete vehicle refinishing.
6. Present to the prospective employer the required skills for entry-level employability in the auto body repair and refinishing trade, along with proper work attitude and ethics. Will also exhibit responsibility and professionalism upon seeking employment in the auto body repair and refinishing trade.

Map of Program Learning Outcomes by Course

	PL0 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6
ABRP 20E	3	3	3	N/A	N/A	N/A
ABRP 20F	3	3	3	3	N/A	2
ABRP 20G	3	3	3	2	N/A	2
ABRP 20H	3	3	3	3	N/A	2
ABRP 20I	3	3	3	3	N/A	2
ABRP 22E	3	N/A	1	N/A	3	2
ABRP 22F	3	N/A	1	N/A	3	2
ABRP 22G	3	N/A	1	N/A	3	2
ABRP 22H	3	N/A	1	N/A	3	2
ABRP 22I	3	N/A	1	N/A	3	2
ABRP 40E	3	3	3	3	N/A	2
ABRP 40F	3	3	3	3	N/A	2
ABRP 40G	3	3	3	3	N/A	2
ABRP 40H	3	3	3	3	N/A	2
ABRP 40I	3	3	3	3	N/A	2
ABRP 41E	3	3	3	3	N/A	2
ABRP 41F	3	3	3	3	N/A	2
ABRP 41G	3	3	3	3	N/A	2
ABRP 41H	3	3	3	3	3	3
ABRP 41I	3	3	3	3	3	3
ABRP 44E	3	3	3	3	N/A	3
ABRP 44F	3	3	3	3	N/A	3
ABRP 44G	3	N/A	1	N/A	3	3
ABRP 44H	3	N/A	1	N/A	3	3
ABRP 44I	3	3	3	3	3	3

1. Student should be able to discuss and demonstrate a basic understanding of subject matter.
2. Student “can” demonstrate acceptable performance and understanding of subject matter.
3. Student “will” demonstrate acceptable performance and understanding of subject matter.

Program learning outcomes to be assessed each year of the program review cycle.

Identify the learning outcomes by number

Timetable

	S 10	F 10	S 11	F 11	S 12	F 12	S 13	F 13	S 14	F 14
PLO 1			ABRP 20EFGHI	ABRP 22EFGHI	ABRP 40EFGHI	ABRP 41EFGHI	ABRP 20EFGHI	ABRP 22EFGHI	ABRP 40EFGHI	ABRP 41EFGHI
PLO 2			ABRP 20EFGHI	ABRP 22EFGHI	ABRP 40EFGHI	ABRP 41EFGHI	ABRP 20EFGHI	ABRP 22EFGHI	ABRP 40EFGHI	ABRP 41EFGHI
PLO 3			ABRP 20EFGHI	ABRP 22EFGHI	ABRP 40EFGHI	ABRP 41EFGHI	ABRP 20EFGHI	ABRP 22EFGHI	ABRP 40EFGHI	ABRP 41EFGHI
PLO 4			ABRP 20EFGHI	ABRP 22EFGHI	ABRP 40EFGHI	ABRP 41EFGHI	ABRP 20EFGHI	ABRP 22EFGHI	ABRP 40EFGHI	ABRP 41EFGHI
PLO 5			ABRP 20EFGHI	ABRP 22EFGHI	ABRP 40EFGHI	ABRP 41EFGHI	ABRP 20EFGHI	ABRP 22EFGHI	ABRP 40EFGHI	ABRP 41EFGHI
PLO 6			ABRP 20EFGHI	ABRP 22EFGHI	ABRP 40EFGHI	ABRP 41EFGHI	ABRP 20EFGHI	ABRP 22EFGHI	ABRP 40EFGHI	ABRP 41EFGHI

A) Evidence of Industry Validation

At this time there is no current official industry validation of the ABRP Program. There is ongoing informal discussion with the ABRP Advisory Committee members as problems or concerns arise. I have requested the advisory committee chair to schedule an advisory committee meeting this Fall 2012 semester.

B) Expected Level Achievement

All students are required to take a capstone class prior to proceeding to the next section of the ABRP Program. They are expected to complete a “live” project in the laboratory to meet industry standards. An example, a student in corrosion repair must complete a project employing the skills and knowledge they acquired prior. Another example is a student is required refinish a complete vehicle to industry standards and more importantly, the vehicles owner satisfaction.

C) Courses Assessed

During the academic year of 2011-2012 the ABRP 20E module was reviewed and revised to not only include IICAR information, but rewritten to make it a more user friendly instructional packet. For the current academic year, 2012-2013, I am reviewing and revising the ABRP 20F module to include updated IICAR information.

D) Assessment Strategy/Instrument

An assessment strategy that I employ to insure that there is a seamless transition from one topic to the next is to place my self as a student and review the curriculum content being presented to see if I can understand it. I also seek the advice of members of the ABRP Advisory Committee to review the module handouts and for them to help me with any modifications before it is presented to the students. Because of the programs association with IICAR, I use their standards as an instrument to gauge the ABRP Programs performance in presentation of materials and expectations of student outcomes.

E) Results of Program Assessment

A result of the program assessment of the ABRP 20E module is a weakness was found in the sequence in the presentation of course materials that students enrolled in the ABRP 20E modules. That module has been rewritten to present a more “user friendly” format, with detailed instructions for the students as they completed their course work in a timely manner. Another improvement is each individual student is presented with a printed time line as to when they are expected to complete the modules they are enrolled in for the semester.

For the assessment of the ABRP 20F module, started during the Spring 2012 semester, changes to laboratory presentations have been implemented this Fall 2012 semester. The students are now learning additional welding techniques, previously not consistently taught to beginning students, only to advanced students. A member of the ABRP Advisory Committee brought this to

my attention, as a student may go to work in industry weak in that form of welding.

F) Other Comments

No content.

G) Next Steps

Continue revising the program modules to include IICAR curriculum materials, classroom props and training aids. The 20E, 20F, 22E and 22F are the most critical as these modules are the first classes new students enroll in. Once they are done I can then review the rest of the module at the rate of two or three a semester. Due to the increased enrollments, possibly adding more sections to accommodate additional students.