Advanced Technology Division

Auto Body and fender Technology Unit Plan

Lane Community College

Revised 3/16/05

Advanced Technology Division

Auto Body and Fender Technology Unit Plan

Table of Contents

Advanced Technology Division

Auto Body and Fender Technology Unit Plan

Alignment with the College

Auto Body and Fender Technology is a credit instructional program and has been offered at Lane Community College since 1976. The program is administered under the Office of Instruction and Student Services through the Advanced Technology Division.

Auto Body and Fender Technology program is centrally aligned with the College's strategic directions, core values, and learning centered principles.

Strategic Directions

Achieve Financial Stability: This program demonstrated a reduction in cost per student for FY03. This means more students were served with less funds while maintaining the excellent quality of the program.

Enhance the College Climate: This program actively recruited students from under-representative populations.

Core Values

Learning: Learning is both theoretical and applied. Student learning progresses from basic to advanced technical, academic and employability skills.

Diversity and Accessibility: The program faculty welcome students from diverse backgrounds. Students with special needs are accommodated with appropriate supplemental learning technologies and experiences.

Innovation: Faculty maintain their expertise in the field and incorporate advanced technologies in the curriculum. The faculty has made a commitment to maximize the use of innovative instructional technologies to transform the curriculum. Some examples of this include transferring lecture notes to PowerPoint and assisting the division in developing a technical common core curriculum.

Collaboration and Partnership: The faculty work very closely with their program advisory committee. This committee is a representation of active community business partners who provide advice and program support. .

Integrity: The program faculty have demonstrated a high degree of integrity. They are openly accountable to perform according to the policies, procedures and expectations of the College, the division, the advisory committee, and most importantly, the students.

Advanced Technology Division

Auto Body and Fender Technology Unit Plan

Learning Centered Principles

Substantive Change in Individual Learners: The Automotive Technology program excels in transforming student lives. This transformation is demonstrated when a new student enters the program without entry level skills and can complete the two-year program to obtain a high-wage career in the automotive industry.

Document Learning Success: As students progress through the program, they obtain the required training to pass one of the eight ASE technical certifications. The ability of the Automotive Technology students to obtain these certifications documents learning success.

Advanced Technology Division

Auto Body and Fender Technology Unit Plan

Unit Description

The Auto Body and Fender Technology Program is an occupational, two-year Associate of Applied Science degree with options in Auto Collision or Auto Paint and/or a two-year certificate of completion program.

This program trains technicians in the latest paint and collision technology using state-of-the-art laboratories. Students learn to repair and reconstruct automobile bodies to industry standards using the latest collision repair equipment as well as current refinishing procedures. The advanced equipment and expertise of the faculty make Lane's Auto Body and Fender Technology Program the best way to enter the field

Faculty in the program bring considerable field experience to the classroom and regularly attend workshops at manufacturer training centers to help them keep up with technological changes in the industry.

The program provides classroom instruction, considerable on-car training in the laboratories, and technical field experience that prepares you for employment in specialization in the auto collision industry, for careers in auto dealerships, custom repair shops, independent body shops, motor home manufacturing, employment with collision jobbers, auto collision repair estimators, and auto collision manufacturers.

Auto Collision Option prepares students for Auto Paint Option prepares students for specialization in the auto paint industry, for careers in auto dealerships, custom paint shops, independent paint shops, heavy-duty truck shops, the motor home industry, and with paint jobbers and paint equipment manufacturers

Employment in this industry is estimated to be larger than average. Growth is projected to be faster than average. Annual new openings are expected to be much higher than average. Reasonable employment opportunities exist for trained workers. Those with an associate degree in one of the program options will have a competitive advantage in the labor market. Trained personnel can earn $20,000-25,000 annually in auto body and fender. Auto Collision and Auto Paint may earn $35,454 average annually.

Students may enter this program fall, winter or spring term. For consent to enroll in major courses, students must attend a program orientation in fall terms (dates available in Counseling or the Students First! Center), or contact the department advisor/counselor in winter and spring terms. Students are selected based on the date the major is declared.

Advanced Technology Division

Auto Body and Fender Technology Unit Plan

Degrees and Certificates

Two-Year Associate of Applied Science Degree	*Credits*
First Year	
Fall	
Beginning Auto Paint AB 132	6
Paint and Collision AB 134	6
Effective Learning EL 115	3
Choice of: Workplace Safety HE 125; First Aid HE 252; PE/Health requirement	3
Total Credits	18
Winter	
Beginning Auto Paint AB 132	6
Paint and Collision AB 134	6
Art elective	2
Applied Geometry for Technicians MTH 076 or higher	4
Total Credits	18
Spring	
Beginning Auto Collision AB 133	6
Paint and Collision AB 134	6
Concepts of Computing: Info Processing CS 120	4
Total Credits	16
Second Year	
Fall	
Beginning Auto Collision AB 133	6
Intermediate Auto Collision AB 261	6
Introduction to College Writing: Workplace Emphasis WR 115W or higher	3
Business elective	3
Total Credits	18
Winter	
Intermediate Auto Paint AB 260	3
Intermediate Auto Collision AB 261	9
Applied Algebra for Technicians MTH 086 or higher	4
Arts/Letters requirement	4
Total Credits	19
Spring	
Intermediate Auto Paint AB 260	12
Human Relations requirement	3
Cooperative Education: Auto Body Repair AB 280 (optional)	3
Total Credits	15-18
Note: Recommended courses prior to entering major core courses—Effective Learning, Basic Mathematics Applications, Workplace Safety, and Introduction to College Writing: Workplace Emphasis.	

Advanced Technology Division

Auto Body and Fender Technology Unit Plan

Two-Year Certificate of Completion	Credits
First Year	
Fall	
Beginning Auto Paint AB 132	6
Paint and Collision AB 134	6
Effective Learning EL 115	3
Choice of: Workplace Safety HE 125; First Aid HE 252; PE/Health requirement	3
Total Credits	18
Winter	
Beginning Auto Paint AB 132	6
Paint and Collision AB 134	6
Art elective	2
Applied Geometry for Technicians MTH 076 or higher	4
Total Credits	18
Spring	
Beginning Auto Collision AB 133	6
Paint and Collision AB 134	6
Total Credits	12
Second Year	
Fall	
Beginning Auto Collision AB 133	6
Intermediate Auto Collision AB 261	6
Introduction to College Writing: Workplace Emphasis WR 115W or higher	3
Total Credits	15
Winter	
Intermediate Auto Paint AB 260	3
Intermediate Auto Collision AB 261	9
Total Credits	12
Spring	
Intermediate Auto Paint AB 260	12
Human Relations requirement	3
Cooperative Education: Auto Body Repair AB 280 (optional)	3
Total Credits	15-18

Advanced Technology Division

Auto Body and Fender Technology Unit Plan

Auto Collision Option **Two-Year Associate of Applied Science Degree**	**Credits**
First Year	
Fall	
Beginning Auto Collision AB 133	6
Paint and Collision AB 134	6
Effective Learning EL 115	3
Choice of: Workplace Safety HE 125; First Aid HE 252; PE/Health requirement	3
Total Credits	18
Winter	
Beginning Auto Collision AB 133	6
Paint and Collision AB 134	6
Art elective	2
Applied Geometry for Technicians MTH 076 or higher	4
Total Credits	18
Spring	
Intermediate Auto Collision AB 261	6
Paint and Collision AB 134	6
Concepts of Computing: Info Processing CS 120	4
Total Credits	16
Second Year	
Fall	
Intermediate Auto Collision AB 261	9
Advanced Auto Collision AB 263	3
Introduction to College Writing: Workplace Emphasis WR 115W or higher	3
Business elective	3
Total Credits	18
Winter	
Advanced Auto Collision AB 263	12
Arts/Letters requirement	3
Applied Algebra for Technicians MTH 086 or higher	4
Total Credits	19
Spring	
Beginning Auto Paint AB 132	12
Human Relations requirement	3
Cooperative Education: Auto Body Repair AB 280 (optional)	3
Total Credits	15-18

Advanced Technology Division

Auto Body and Fender Technology Unit Plan

Auto Paint Option **Two-Year Associate of Applied Science Degree**	**Credits**
First Year	
Fall	
Beginning Auto Paint AB 132	6
Paint and Collision AB 134	6
Effective Learning EL 115	3
Choice of: Workplace Safety HE 125; First Aid HE 252; PE/Health requirement	3
Total Credits	18
Winter	
Beginning Auto Paint AB 132	6
Paint and Collision AB 134	6
Art elective	2
Applied Geometry for Technicians MTH 076 or higher	4
Total Credits	18
Spring	
Intermediate Auto Paint AB 260	6
Paint and Collision AB 134	6
Concepts of Computing: Info Processing CS 120	4
Total Credits	16
Second Year	
Fall	
Intermediate Auto Paint AB 260	9
Advanced Auto Paint AB 262	3
Introduction to College Writing: Workplace Emphasis WR 115W or higher	3
Business elective	3
Total Credits	18
Winter	
Advanced Auto Paint AB 262	12
Arts/Letters requirement	3
Applied Algebra for Technicians MTH 086 or higher	4
Total Credits	19
Spring	
Beginning Auto Collosion AB 133	12
Human Relations requirement	3
Cooperative Education: Auto Body Repair AB 280 (optional)	3
Total Credits	15-18
Note: Recommended courses prior to entering major core courses—Effective Learning, Basic Mathematics Applications, Workplace Safety, and Introduction to College Writing: Workplace emphasis.	

Co-Operative Education –

Co-op offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op, students connect theory and practice, develop skills,

expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Auto Body and Fender Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits in AB 280 may be earned in lieu of required Auto Body and Fender course credits.

Organizational Structure

Board of Education
President
Vice President of Instruction
Associate Vice President of Instruction
Division Chair Advanced Technology
Faculty Auto Body and Fender Technology Program

Faculty/Staff

Name	***Dean Bergen***
Classification	Full-Time Faculty
Year Hired	
Degrees/Credentials	

Name	***Dan Kimball***
Classification	Full-Time Faculty
Year Hired	
Degrees/Credentials	

Program Outcomes

Benchmarks

Effectiveness Benchmarks	Description
.	

Efficiency Benchmarks	Description

Advanced Technology Division

Auto Body and Fender Technology Unit Plan

Courses

Course outcomes: Individual course outcomes are listed in course syllabi.

Idealistic course outcomes: Each student would demonstrate skills required by Industry employers and advisory committee members.

Instructional methods: Required textbooks, lecture, video presentations, lab worksheets and assignments, demonstrations, and vehicles and components provided by the school or the student are presently used.

Idealistic instructional methods: Student to instructor ratio of 18:1 or less would allow more complete understanding of material and better pacing to assure complete comprehension by all students.

Instructional environment

Advisory Committee

Advanced Technology Division

Auto Body and Fender Technology Unit Plan

Learning Outcomes

The student who successfully completes all Auto Body and Fender program requirements will:

- adhere to OSHA and industry safety standards.
- effectively.

In addition to the outcomes for Auto Body and Fender, the student who successfully completes all Auto Collision Option program requirements will:

- effectively use state-of-the-art measuring and collision repair equipment.
- demonstrate a thorough knowledge of advances in technology in auto collision.
- enter the workforce with substantial practical experience in collision repair.
- repair and reconstruct automobile bodies to industry standards.

In addition to the outcomes for Auto Body and Fender, the student who successfully completes all Auto Paint Option program requirements will:

- demonstrate thorough knowledge of advances in technology in auto paint.
- effectively use state-of-the-art equipment and materials as well as refinishing procedures.
- enter the workforce with substantial practical experience.

Program Operating Information – Trends

Performance Analysis

Advanced Technology Division

Auto Body and Fender Technology Unit Plan

Unit Initiatives

Unit initiatives are separated into two categories: Maintenance Initiatives and Enhancement Initiatives.

Maintenance initiatives are requests for resources to maintain the existing levels of program efficiency and effectiveness. Maintenance initiatives respond to:

1) any mandatory changes in the program (recurring contracts, change in credits, implementing accreditation or other curriculum standards), and,
2) costs to maintain the existing curriculum and program equipment.

Enhancement initiatives are requests for new resources to implement substantive changes in the program, usually in response to student growth or new curriculua.

Maintenance Initiatives

Initiative ID	Need	Request
E01	Vacuum system (1)	15,000
E02	Paint booth	100,000
E03	Air transformers (10)	5,000
E04	Painters fresh air supply	2,500

Enhancement Initiatives

Initiative ID	Need	Request
M01	Software upgrades (4)	2,400
M02	Buffers (6)	1,800
M03	Spray guns (15)	6,000
M04	Sanders - DA (6)	1,500
M05	Recycler	3,500
M06	Paint shaker	2,000
M07	Grinders (8)	2,400
M08	Bench tool sets (6)	9,000
M09	Drills (6)	540
M10	Frame rack equipment set	8,000
M11	Laser measuring system	15,000
M12	Sonar measuring system	35,000
M13	Universal measuring sys.	10,000
M14	John Bean 4-wheel drive alignment	30,000
M15	John Bean lift	13,000

Advanced Technology Division

Auto Body and Fender Technology Unit Plan

Division/Unit	Initiative ID	Division Priority	Date of Initiative	Expected completion date	Initiative	Resource Description	$$	Recurring / Nonrecurring	Resource Type (mark with an "X")				Funding Sources (mark with an "X")					
									Payroll (w/OPE)	Equipment	Space	Other	Existing	New G-F	CP	TACT	CD	Other
AutoBody	E01	16	1/9/04	6/30/05	New Equipment	Vacuum system (1)	15,000	NR		x			15		15			
AutoBody	E02	17	1/9/04	6/30/05	New Equipment	Paint booth	100,000	NR		x			16		16			
AutoBody	E03	18	1/9/04	6/30/05	New Equipment	Air transformers (10)	5,000	NR		x			17		17			
AutoBody	E04	19	1/9/04	6/30/05	New Equipment	Painters fresh air supply	2,500	NR		x			18		18			
AutoBody	M01	1	1/9/04	6/30/05	Replacement Equipment	Software upgrades (4)	2,400	R		x			19			1		
AutoBody	M02	2	1/9/04	6/30/05	Replacement Equipment	Buffers (6)	1,800	R		x			1		1			
AutoBody	M03	3	1/9/04	6/30/05	Replacement Equipment	Spray guns (15)	6,000	R		x			2		2			
AutoBody	M04	4	1/9/04	6/30/05	Replacement Equipment	Sanders - DA (6)	1,500	R		x			3		3			
AutoBody	M05	5	1/9/04	6/30/05	Replacement Equipment	Recycler	3,500	NR		x			4		4			
AutoBody	M06	6	1/9/04	6/30/05	Replacement Equipment	Paint shaker	2,000	NR		x			5		5			
AutoBody	M07	7	1/9/04	6/30/05	Replacement Equipment	Grinders (8)	2,400	R		x			6		6			
AutoBody	M08	8	1/9/04	6/30/05	Replacement Equipment	Bench tool sets (6)	9,000	R		x			7		7			
AutoBody	M09	9	1/9/04	6/30/05	Replacement Equipment	Drills (6)	540	R		x			8		8			
AutoBody	M10	10	1/9/04	6/30/05	Replacement Equipment	Frame rack equipment set	8,000	NR		x			9		9			
AutoBody	M11	11	1/9/04	6/30/05	Replacement Equipment	Laser measuring system	15,000	NR		x			10		10			
AutoBody	M12	12	1/9/04	6/30/05	Replacement Equipment	Sonar measuring system	35,000	NR		x			11		11			
AutoBody	M13	13	1/9/04	6/30/05	Replacement Equipment	Universal measuring sys.	10,000	NR		x			12		12			
AutoBody	M14	14	1/9/04	6/30/05	Replacement Equipment	John Bean 4-wheel drive alignment	30,000	NR		x			13		13			
AutoBody	M15	15	1/9/04	6/30/05	Replacement Equipment	John Bean lift	13,000	NR		x			14		14			