

## COURSE OUTLINE OF RECORD



**Palo Verde College**

**One College Drive, Blythe, CA 92225  
(760) 921-5500**

Course Control Number: CCC000554185

Course Outline Approval Dates		
	Curriculum Committee	Board of Trustees
Face-to-Face	11/14/13	12/10/13
Correspondence Ed.		
Distance Ed.		

**Course Information. Course Initiator:** Henry Rinaldi

Subject Area and Course Number: <b>AUT 091</b>		Course Title: <b>Automotive Racing Fabrication</b>		
New Course <input checked="" type="checkbox"/> Revised <input type="checkbox"/> Updated <input type="checkbox"/>		Static ID <b>I09004</b>	<b>TOP Code 0948.00</b>	<b>Credit Status Request</b> <b>C=Credit-Not Degree Applicable</b>
Classification Code <b>Y=Credit Course</b>		<b>SAM Code</b> <b>C=Clearly occupational</b>		<b>Course prior to college level</b> <b>Y=Not applicable</b>
<b>Noncredit category</b> <b>Y=Not Applicable; Credit Course</b>		Meets a unique need: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Course duplicated: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Demand/Enrollment Potential: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Transfer request <b>C=Non-transferable</b>		Articulation request: UC <input type="checkbox"/> CSU <input type="checkbox"/> CSU-GE <input type="checkbox"/> IGETC <input type="checkbox"/>		
<b>Basic Skills</b> <b>N=Not a Basic Skills Course</b>		<b>Funding Agency</b> <b>Y=Not Applicable</b>		Course Program Status <b>2=Stand-alone</b>
Co-Op Status <b>N=Not Part of a Co-Op Program</b>		Special Class Status <b>N=Course is Not a Special Class</b>		

**JUSTIFICATION FOR NEED:**

*(Briefly describe the primary method used to determine the need for this course. For example, Labor Market Projections from Employment Development Department, employer survey, community or student interest survey, state licensing requirements or mandated certification. A maximum of 4000 characters is allowed.)*

AUT 091 Intermediate Automotive Fabrication and Setup is an entry level class that teaches the student the rules and regulations of stock car racing. Students learn the equipment and terminology related to stock car racing as well as how to properly build a legal roll cage. This class is requested by the program's industry, our main sponsor (Lucas Oil) and provides students with valuable work based learning opportunities. AUT 091 is a required class for the Automotive Fabrication Certificate. The EDD for Riverside & Imperial County projects a 10.5% growth in the automotive service technician & mechanic trade. With a certificate or a degree, students have been employed at local and out of town dealerships and independent shops.

**CATALOG DESCRIPTION:**

This course is designed to prepare students to understand the rules and regulations of various sanctioned stock car races. Students will prepare a stock car to meet requirements and be able to participate in sanctioned racing events. Students will fabricate a legal roll cage including a legal petty bar.

**SEMESTER UNITS: 2**

**Course Length: Lecture: 18 Laboratory: 72 Clinic/Field:**

**PRE-REQUISITES, CO-REQUISITES AND ADVISORIES:**

If the course has pre-requisites, co-requisites or advisories, list them here and attach a completed Pre-requisite Justification form.

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**COURSE OBJECTIVES:**

**Upon successful completion of the course the student will be able to:**

1. Design & fabricate a legal roll cage
2. Demonstrate race car safety

**STUDENT LEARNING OUTCOMES:**

1. Build a legal roll cage
  2. Study factory stock rules and regulations
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**COURSE OUTLINE AND SCOPE:**

**1. Outline of topics or content:**

1. Practicing Safety in the Shop
  - a. Personal safety
  - b. Tool and equipment safety
  - c. Work area safety
  - d. Manufacture's warnings and government regulations
2. Shop Tools
  - a. Measuring systems
  - b. Shop tools
  - c. Service manuals
3. Track Rules and Regulations
4. Track Safety
5. Roll Cage Fabrication
6. Knowledge how to use tubing bender and notcher
7. Knowledge how to use Mig welder

**2. If a course contains laboratory or clinic/field hours, list examples of activities or topics:**

1. Perform technical safety inspections.
2. Perform technical performance inspections.
3. Complete all aspects of vehicle fabrication.

**3. Examples of reading assignments:**

1. Technical manuals
2. Current literature as assigned by instructor
3. I-10 Speedway published rules and regulations
4. I-10 Speedway published division rules

**4. Examples of writing assignments:**

1. Term paper
2. Essays

**5. Appropriate assignments to be completed outside of class:**

1. Term paper
2. Research

**6. Appropriate assignments that demonstrate critical thinking:**

1. Students will perform analysis and evaluation of reading and/or classroom materials and utilize this analysis in classroom discussion and/or in writing assignments.
2. Position paper or oral presentation that compares and contrasts course concepts and topics.

**7. Other assignments (if applicable):**

## **8. Face-to-Face Course Sections:**

**Face-to-face education** is a mode of delivery in which instruction is delivered in a traditional classroom setting, with instructor and students located simultaneously in the same classroom facility.

### **a. Describe the methods of instruction.**

1. Lecture
2. Class/group discussion
3. Hands-on experience
4. Videos
5. Books

### **b. Describe the methods of evaluating of student performance.**

1. Quizzes
2. Tests
3. Class discussion and participation in lab
4. Observation and evaluation of practical skills

### **c. Describe how the confidentiality of the student's work and grades will be maintained.**

[Suggested response] Instructors shall make reasonable efforts to protect the confidentiality of students' grades and graded work consistent with practices described in the Family Education Rights and Privacy Act (FERPA).

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### **d. If the course has a lab component, describe how lab work is to be conducted and how student work is to be evaluated.**

All students are assigned predetermined tasks that pertain to the class they are taking. They are graded on how well they perform the task. Students are evaluated based on accuracy & time it takes to be completed.

**Note: Students will be encouraged by instructors of this course to direct themselves to the College's Disabled Students' Programs and Services (DSP&S) department if they believe they have a learning disability.**

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## 9. Correspondence Education Course Sections (correspondence, hybrid correspondence)

**Correspondence education** is a mode of delivery in which instructional materials are delivered by mail, courier or electronic transmission to students who are separated from the instructor by distance. Contact between instructor and student is asynchronous. **Hybrid correspondence education** is the combination of correspondence and face-to-face interaction between instructor and student.

- a. Describe the methods of instruction.
- b. Describe the methods of evaluating student performance.
- c. Describe how regular, effective contact between the instructor and a student is maintained.

(Note: Regular, effective contact includes, but is not limited to, exams; quizzes; essays; research papers; graded homework assignments; syllabus receipt; office hours; instant messaging; and synchronous online discussions, e-mails, letters, notes, phone calls, or postings on the Bridge between instructor and student.)

- d. Describe procedures that help verify the individual submitting class work is the same individual enrolled in the course section.

[Suggested response]: Consistent with policy elements listed in the ACCJC's "Policy on Distance Education and on Correspondence Education," the College verifies the identity of a student who participates in class or coursework by using, at the College's discretion, such methods as a secure log-in and password, proctored examinations, or other technologies or practices that are developed and effective in verifying each student's identification.

- e. Describe procedures that evaluate the readiness of a student to succeed in a correspondence or hybrid correspondence course section.

(The procedure might consist of a short assessment questionnaire prepared by the instructor and self-administered by the student. The questionnaire would evaluate areas such as working independently, adhering to timelines, and familiarity with working online and with computer technology. The student would use the resulting score to evaluate his or her readiness to take the course in a correspondence or hybrid correspondence instructional mode.)

- f. Describe how the confidentiality of the student's work and grades will be maintained.

[Suggested response] Instructors shall make reasonable efforts to protect the confidentiality of students' grades and graded work consistent with practices described in the Family Education Rights and Privacy Act (FERPA).

- g. If the course has a lab component, describe how lab work is to be conducted and how student work is to be evaluated.

- h. If the course requires specialized equipment, including computer and computer software or other equipment, identify the equipment, and describe how it is to be accessed by students.

**Note: Students will be encouraged by instructors of this course to direct themselves to the College's Disabled Students' Programs and Services (DSP&S) department if they believe they have a learning disability.**

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## **10. Distance Education Course Sections (online, ITV, hybrid)**

**Online education** is a mode of delivery in which all instruction occurs online via the Internet. Student and instructor access to email and the Internet is required. Students are required to complete class work using email, chat rooms, discussion boards and other instructional online venues. **Interactive television (ITV)** is a mode of synchronous delivery in which instruction occurs via interactive television (closed circuit). **Hybrid** instruction is a combination of face-to-face instruction and online instruction.

- a. Describe the methods of instruction.
- b. Describe the methods of evaluating student performance.
- c. Describe how regular, effective contact between the instructor and a student is maintained.

(Note: Regular, effective contact includes, but is not limited to, exams; quizzes; essays; research papers; graded homework assignments; syllabus receipt; office hours; instant messaging; and synchronous online discussions, e-mails, letters, notes, phone calls, or postings on the Bridge between instructor and student.)

- d. Describe procedures that help verify the individual submitting class work is the same individual enrolled in the course section.

[Suggested response]: Consistent with policy elements listed in the ACCJC's "Policy on Distance Education and on Correspondence Education," the College verifies the identity of a student who participates in class or coursework by using and the College's discretion, such methods as a secure log-in and password, proctored examinations, or other technologies or practices that are developed and effective in verifying each student's identification.

- e. Describe procedures that evaluate the readiness of a student to succeed in an online, ITV or hybrid course section.

(The procedure might consist of a short assessment questionnaire prepared by the instructor and self-administered by the student. The questionnaire would evaluate areas such as working independently, adhering to timelines, and familiarity with working online and with computer technology. The student would use the resulting score to evaluate his or her readiness to take the course in an online, ITV or hybrid instructional mode.)

- f. Describe how the confidentiality of the student's work and grades will be maintained.

Instructors shall make reasonable efforts to protect the confidentiality of students' grades and graded work consistent with practices

described in the Family Education Rights and Privacy Act (FERPA).

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- g. If the course has a lab component, describe how lab work is to be conducted and how student work is to be evaluated.**
  
- h. If the course requires specialized equipment, including computer and computer software or other equipment, identify the equipment, and describe how it is to be accessed by students.**

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**REPRESENTATIVE TEXTBOOKS AND OTHER READING AND STUDY MATERIALS:**

**List author, title, and current publication date of all representative materials.**

Instructor-assigned texts and videos:

Modern Automotive technology 2009 by James E. Duffy  
Automotive Technology 2003 by James D. Halderman  
Shop Manual: NATEF Standards Job Sheets 2005 by Chris Johnson  
Videos: Goodheart-Willcox Publisher  
Instructor hand outs  
Appropriate newspaper, magazines, and journal articles  
I-10 Speedway published rules and regulations

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**SIGNATURES:**

**COURSE INITIATOR:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**LIBRARY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**CHAIR OF CURRICULUM COMMITTEE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**SUPERINTENDENT/PRESIDENT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_