Basic Course Information

Semester	**Fall 2015**	Instructor Name	**Ronnie Garrie**
Course Title & #	**AU T 075 Basic Shop Skills**	Email	**ronnie.garrie@imperial.edu rgarrie@iid.com**
CRN #	**10893**	Webpage	**n/a**
Room	**1100-1101**	Office	**Part-Time: No IVC Office**
Class Dates	**August 17 through December 15**	Office Hours	**6:00 AM to 3:30 PM**
Class Days	**Tuesday**	Cell Phone #	**(760) 275-3897 or Office phone (760) 339-9442**
Class Times Units	**6:00 PM – 9:10 PM, Tuesday** **3 Units**	Contact if student will be out or has emergency	**Contact me by cell phone or Email rgarrie@iid.com**

Course Description

This course is a comprehensive course in tool usage, nomenclature, and terminology of tools and equipment for the beginning student in the technologies. The course is for the student who has not developed a background in industrial technology, as well as for the bilingual student who wants to improve his/her technical vocabulary. (Nontransferable, non-degree applicable)

Student Learning Outcomes

Upon course completion, with a grade of "C" or better, the successful student will have acquired new skills, knowledge, and/or attitudes as demonstrated by being able to:

1. Identify and locate the most important parts of a vehicle. (ILO1, ILO4)
2. Identify common automotive handtools. (ILO1, ILO3, ILO4)
3. Select the right tool for the given job. (ILO1, ILO3, ILO4)

IVC as an institution has adopted five Student Learning Outcomes (SLO's). They are interconnected with each other. They will be inherent throughout the course:

1. Communication Skills
2. Critical Thinking Skills
3. Personal Responsibility
4. Information Literacy
5. Global Awareness

Student Learning Outcome Objectives:

- Identify a large number of basic automotive and tools by their proper name.
- Identify a number of automotive repair uses for basic hand tools.
- Identify hazards associated with the use of basic hand tools.
- Display the correct and safe way of using basic tools.
- Work/study cooperatively and contribute/assist fellow students in class learning.
- Communicate and demonstrate global awareness and responsibility.

The class will follow a performance-based curriculum that presents every student with the knowledge tools that will instill the skills to excel in Automotive Maintenance and Repair as well as a responsible member of the community.

Course Objectives and Goals

To develop safe shop practices and become familiar with Cal/OSHA standards as they apply to the use of basic automotive hand tools and shop practices. To develop good judgment in the selection of the appropriate hand tools for automotive repair procedures. To gain entry level knowledge and skills to successfully continue automotive vocational training.

Upon course completion, with a grade of "C" or better, the successful student will have acquired new skills, knowledge, and/or attitudes as demonstrated by being able to:

1. Demonstrate safe job practices.
    - Describe general safety rules for the auto shop.
    - Shop machines.
    - Hoists, jacks, lifts, and safety standards.
    - Battery charging and electrical equipment.
    - Eye and hand protection, clothing, breathing protection.
    - Fire and electrical emergencies.
    - Location and multi-class fire extinguishers.
    - Location of emergency items.
    - Safety shop color codes.
    - Compressed air, hand tools, air rules, and environmental safety.

2. Demonstrate how to use basic hand tools.
    - Common measuring tools.
    - Hand and air wrenches/hammers.
    - Coil spring compressors, brake pliers, screwdrivers, and hammer.
    - Lubrication tools.
    - Battery and charging system tools.
    - Brake measurement tools.
    - Suspension and wheel alignment electronic tools.
    - Electrical circuit tools.

3. Methods of evaluation to determine if objectives have been met by student/exam and grading procedures:
    - There will be a mid-term and final exam. Each will be worth 25% of the student's final grade. The mid-term will have 82 questions. The final exam will have 112 questions. ASE and Tool Identification type tests.

- There will be a student formal verbal class presentation due by the 8th week of this course, given before the lecture session is completed. The presentation will be delivered on a part of the subject material of this course. The length will be 5 to 15 minutes long.
- There will be homework tests each week on the chapters that have been assigned. The presentation and the homework tests will be worth 25% of the student's grade. The remaining 25% of the student's grade will be based on the student's performance in the student's workbook and worksheets.
- All quizzes and tests must be completed and delivered to the instructor the following week they are assigned. Midterm and Final Tests will be delivered to the instructor after completion in class.
- And final goals are to develop safe shop practices and become familiar with Cal/OSHA standards as they apply to the use of basic automotive hand tools and shop practices. To develop good judgment in the selection of the appropriate hand tools for automotive repair procedures. To gain entry level knowledge and skills to successfully continue automotive vocational training.

Textbooks & Other Resources

1. Modern Automotive Technology, James E. Duffy 8th Edition (Textbook). ISBN number:
2. Modern Automotive Technology, James E. Duffy 8th Edition (Workbook). ISBN number:

Required Materials:

- Pen and pencils.
- Lined 8"x 11-1/2" standard writing paper.
- Textbooks.
- Proper clothing suitable for shop environment (long pants, leather shoes, safety glasses, gloves, and means to secure long hair).

Course Requirements and Instructional Methods

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one (1) hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

Course Grading Based on Course Objectives

Grading System: Letter-Grade only.

Percent of Overall Grade.

A. 25% - Completed Lab Assignments (hand in all of the assignments -100 points).

B. 25% - Completed Weekly Homework Tests and Class Presentation (hand in all assignments - 100 points).

C. 25% - Midterm Exam (Answer all 50 questions right – 100 points).

D. 25% - Final Exam (Answer all 100 questions right – 100 points).

A+B+C+D divided by 4 = Average Points (0 to 100)

Letter Grades.

Points Scores = Letter Grade

90 - 100 = A - Superior

80 - 89 = B - Better Than Average

70 - 79 = C - Average

60 - 69 = D - Below Average

Below 60 = F - Failing

Extra-Credit Work	None
Outside Projects	None
Work Handed in Late	Accepted with valid reason.

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.
- Four (4) tardies equal one (1) absence. Five (5) absences will require the student to be dropped and/or given an incomplete or an "F" for the course. A doctor's release may be considered an excused absence depending on the total number of classes missed. Please review 2015 Class Schedule Booklet statement on Class Attendance.
- Tardiness, leaving early – report to your instructor.
- Call-in because of absence – call your instructor or leave a message at the phone numbers listed at the top of this syllabus.

Classroom Etiquette and Classroom/Laboratory Safety

- Electronic Devices: Cell-phone and electronic devices – set on silent mode and answer during break.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Visiters and children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.
- Class breaks: 5 minutes for each hour of class.
- Participation in class: To the best of your ability.
- Safety rules: As instructed in the first two meetings and then as directed by staff during the classes.

Safety Rules and Regulations (Code of Safe Practices):

(1) Safety glasses must be worn in designated shop areas at all times.
(2) No work shall be done in the shop or computer lab except during designated class time.
(3) Face masks, face shields, and/or goggles may need to be worn when operating power tools, equipment or machinery, which exposes the student to particulate matter.
(4) Wear proper the clothing, this is a working shop atmosphere.
  (a) Do not wear loose fitting clothing, or unsecured long hair, or articles that may be caught in moving machinery, equipment, or power tools.
  (b) Substantial and appropriate all leather shoes shall be worn in the lab area. No open toed footwear. It is recommended that boot-type footwear be worn in the shop area.
  (c) Wear long pants, gloves when necessary, and a means to secure long hair when required.
(5) All power equipment shall be shut off when not in use.
(6) Do not leave power equipment or machinery unattended when on.
(7) Do not use tools, equipment, or machinery you have not been instructed on how to use.
(8) Use the proper tool for the job at hand.
(9) When operating the equipment with another student, make sure it is understood which student is the operator.
(10) Observe rules concerning operator's safety zones.
(11) Do not hold a conversation with someone operating power tools, equipment or machinery. The distraction may cause an accident.
(12) Never operate power tools, equipment or machinery without the proper safety guards in place.
(13) When using air, be sure that no one will be the target of the air blast.
(14) Unsafe work practices or safety hazards are to be reported to your instructor.
(15) Any accident or injury, regardless of how minor, must be reported to your instructor immediately.
(16) No horseplay, running, scuffling, etc. on the college facilities.

(17) No music allowed in the auto shop.
(18) No parking in front of the gate.
(19) No work should be done without instructor's permission. No parking inside the shop during lecture time.
(20) Each student will be responsible for keeping the work area clean.
(21) Students cannot leave early without instructor's permission.
(22) No helpers or visitors during lab activities.
(23) Clean-up – clean your area of work and as directed by your instructor.

Each student is required to comply with the schedule established by the automotive program at Imperial Valley College. Students are required to attend class each day class is in session. If for any reason a student is absent he or she is responsible for making up any missed literature or lab assignments. It is recommended that the students call or leave a message to inform the instructor if he or she is ill and/or bring a doctor's note upon returning to class.

- You must bring your textbook to every class meeting.
- You must bring notebook and pencils to be prepared for taking class notes on class lectures, homework, videos, and class lab activities.
- You must be on time for each class.
- You must participate during lecture and lab assignments.
- You must hand your assignments in on time and take your exams on time.

Academic Honesty

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to 'cite a source' correctly, you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an

examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

Additional Student Services

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- Blackboard: Check for special announcements and additional instructional materials and videos.
- You may consult your college map for the Math Lab, Reading & Writing Lab, and Study Skills Center (library).
- Library Services: As you know there is more to our library than just books. You have access to tutors in the Study Skills Center, study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313, if you feel you need to be evaluated for educational accommodations.

Physical Conditions: Notify the instructor if you have any physical conditions which could possibly affect your safety or health in the performance of the course class/laboratory assignments. Adjustments to your assignments, if necessary, will be made.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- Student Health Center. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District and El Centro Regional Center provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC Student Health Center at Room 2109, telephone 760-355-6310.
- Mental Health Counseling Services. Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the IVC Mental Health Counseling Services at 760-355-6195 in Room 2109 for more information.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process of law. For further information regarding student rights and responsibilities, please refer to the IVC General Catalog.

Harassment Statement:

All forms of harassment are contrary to basic standards of conduct between individuals and are prohibited by state and federal law, as well as the District's policy, and will not be tolerated. The District is committed to providing an academic and work environment that respects the dignity of individuals and groups. The District shall be free of sexual harassment and all forms of its sexual intimidation and exploitation. If someone says or

does anything to you or someone else that makes you feel uncomfortable or that you feel is inappropriate contact your instructor immediately.

Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC Library Department provides numerous Information Literacy Tutorials to assist students in this endeavor.

Anticipated Class Schedule / Calendar and Important IVC Dates

Fall 2015 Important Dates:

• Late registration	Aug. 17 – 29.
• Deadline to drop full-term classes without owing fees.	Aug. 30.
• Ticketing for parking violation starts	Aug. 31.
• Deadline to make up for incomplete grade	Sept 25.
• Financial aid return to title IV drop deadline	Oct. 21.
• Deadline to drop full-term classes	Nov. 7.
• Holidays/Fall Recess	Nov 11 and Nov. 23 - 28.
• Last week of classes including final examinations	Dec. 7 -11.

Class Dates and Outlines – Instruction Methodology:

Week 1: August 18 – Class Orientation. Safety Orientation. Shop safety, battery safety, proper clothing, proper use of shop equipment, personal protective equipment, accident prevention, and hazardous materials. No homework this week is due but textbooks need to be purchased. Safety procedures to be followed in the shop. Shop Safety Training and test. Several subject related practical application material worksheets, handed out during the laboratory class, will be completed and handed in to the instructor at the end of the session.

Week 2: August 25 – Chapter 1: The Automobile. Hand in to the instructor at the beginning of the lecture class the answers to the ASE questions in the textbook at the end of the chapter. Workbook Pages 11-18 will be completed in class.

Week 3: September 1 – Chapters 3: Basic Hand Tools. Hand in to the instructor at the beginning of the lecture class the answers to the ASE questions in the textbook at the end of the chapter. Workbook Pages 23-28 will be completed in class.

Week 4: September 8 – Chapter 4: Power Tools and Equipment. Hand in to the instructor at the beginning of the lecture class the answers to the ASE questions in the textbook at the end of the chapters. Workbook Pages 29-33 will be completed in class.

Week 5:	September 15 – Chapter 6: Automotive Measurement and Math, Hand in to the instructor at the beginning of the lecture class the answers to the ASE questions in the textbook at the end of the chapter. Workbook Pages 39-42 will be completed in class.
Week 6:	September 22 – Chapter 8: Fasteners, Gaskets, Seals, and Sealants. Hand in to the instructor at the beginning of the lecture class the answers to the ASE questions in the textbook at the end of the chapter. Workbook Pages 47-49 will be completed in class.
Week 7:	September 29 – Chapter 17: Basic Electricity and Electronics. Hand in to the instructor at the beginning of the lecture class the answers to the ASE questions in the textbook at the end of the chapter. Workbook Pages 93-95 will be completed in class.
Week 8:	October 6 – Chapter 8: Basic Electricity and Electronics. Mid-Term Test during class. Class student presentation due by this day. Practice the use Digital Multi-meter in class.
Week 9:	October 13 – Chapter 9: Vehicle Maintenance Fluid Service and Recycling. Hand in to the instructor at the beginning of lecture class the answers to the ASE questions in the textbook at the end of the chapter. Workbook Pages 51-54 will be completed in class.
Week 10:	October 20 - Chapter 11: Engine Fundamentals. Hand in to the instructor at the beginning of lecture class the answers to the ASE questions in the textbook at the end of the chapter. Workbook Pages 57-61 will be completed in class.
Week 11:	October 27 – Chapter 40: Fuel Tanks, Pumps, Lines, and Filters. Hand in to the instructor at the beginning of lecture class the answers to the ASE questions in the textbook at the end of the chapter. Workbook Pages 239 -248 will be completed in class and evaluated at the end of the session.
Week 12:	November 3 - Chapter 23: Computer System Fundamentals. Hand in to the instructor at the beginning of lecture class the answers to the ASE questions in the textbook at the end of the chapters. Workbook Pages 121-127 will be completed in class.
Week 13:	November 10 - Chapter 81: Brake System Fundamentals. Hand in to the instructor at the beginning of lecture class the answers to the ASE questions in the textbook at the end of the chapter. Workbook Pages 545-555 will be completed in class.
Week 14:	November 17 – Chapter 41: Gasoline Injection Fundamentals. Hand in to the instructor at the beginning of lecture class the answers to the ASE questions in the textbook at the end of the chapter. Workbook Pages 249-256 will be completed in class.
Week 15:	November 24 - Fall Break. No classes 23 through 28.
Week 16:	December 1 – Chapter 10: Career Success. Hand in to the instructor at the beginning of lecture class the answers to the ASE questions in the textbook at the end of the chapter. Review for final test. Last week to complete and hand in any missing assignments

Week 17:	December 8 – Review in Class All Chapters in preparation for final test. Final Test during the last hour of the class.