Imperial Valley Regional Occupational Program
687 State Street, El Centro, CA 92243 - (760) 482-2600 - Fax (760) 482-2750 or 2751 - Website: www.ivrop.org Email: info@ivrop.org

Industry Sector(s): Transportation
Pathway(s): Vehicle Maintenance, Service, and Repair Pathway
Course(s): Automotive Technology I Course Outline – 360 Hours

Major Units of Instruction (Employability Skills, Content Area Skills, and Expected Student Proficiencies) Foundation and Pathway Standards Aligned	Expected Student Learning Results (ESLRs)	Methods of Assessment and Materials Used	Class Hours	Academic Standards Reinforced
1. Suspension and Steering (C1.0-C1.5 & *C8.0-C8.6)* a. Steering systems diagnosis and repair b. Suspension systems diagnosis and repair i. Front suspension ii. Rear suspension iii. Miscellaneous service c. Wheel alignment diagnosis, adjustment and repair d. Wheel and tire diagnosis and repair	Responsible Individual Interpersonal Learners Effective Communicators Technological Producers Problem Solvers	- Lecture - Class Discussion - Individual and Group Practice - Tests and Quizzes - Assignments and worksheets - Portfolio development	60 Year 2	1.1 Math (Math Apps - 2.8 calculations, 3.3 generalizing, Geometry Apps – 1.1, 2.4)
2. Brakes *C8.1,C8.2, C8.6* a. Hydraulic system diagnosis and repair b. Drum brake diagnosis and repair c. Disc brake diagnosis and repair d. Power assist units diagnosis and repair e. Miscellaneous (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair f. Anti-lock brake system	Responsible Individual Interpersonal Learners Effective Communicators Technological Producers Problem Solvers	- Lecture - Class Discussion - Individual and Group Practice - Tests and Quizzes - Assignments and worksheets - Portfolio development	60 Year 1	1.1 Math (Math Apps - 2.8 calculations, 3.3 generalizing, Geometry Apps – 1.1, 2.4)
3. Electrical/Electronic Systems *C7.0 all* a. General electrical system diagnosis *C7.1* b. Battery diagnosis and service *C7.2* c. Starting system diagnosis and repair *C7.3* d. Charging system diagnosis and repair *C7.3* e. Lighting systems diagnosis and repair *C7.4* f. Gauges, warning devices and driver information systems diagnosis and repair *C7.7* g. Horn and wiper/washer diagnosis and repair *C7.6* h. Accessories diagnosis and repair *C7.7*	Responsible Individual Interpersonal Learners Effective Communicators Technological Producers Problem Solvers	- Lecture - Class Discussion - Individual and Group Practice - Tests and Quizzes - Assignments and worksheets - Portfolio development	100 Year 1	1.1 Math (Math Apps - 2.8 calculations, 3.3 generalizing, Geometry Apps – 1.1, 2.4)
4. Engine Performance C*6.0 all and C3.0:C3.1, C3.7* a. General engine diagnosis *6.1* b. Computerized engine controls diagnosis and repair *6.3* c. Ignition system diagnosis and repair *6.4* d. Fuel, air induction and exhaust systems diagnosis and repair 6.2 e. Emissions control systems diagnosis and repair *6.1* i. Positive crankcase ventilation ii. Exhaust gas recirculation iii. Exhaust gas treatment iv. Intake air temperature controls v. Early fuel evaporation (intake manifold temperature) controls vi. Evaporative emissions controls f. Engine related service *6.1*	Responsible Individual Interpersonal Learners Effective Communicators Technological Producers Problem Solvers	- Lecture - Class Discussion - Individual and Group Practice - Tests and Quizzes - Assignments and worksheets - Portfolio development	100 Year 2	1.1 Math (Math Apps - 2.8 calculations, 3.3 generalizing, Geometry Apps – 1.1, 2.4)
5. Essential Employability Skills a. Understand how personal skill development affects employability (positive attitude, honesty, self-confidence, time management). *8.3* b. Understand principles of effective interpersonal skills (group dynamics, conflict resolution, negotiations). *9.0* c. Understand the importance of good academic skills, critical thinking and problem-solving in the workplace. *5.1, (1.0)* d. Understand principles of effective communication.*2.0* e. Understand occupational safety issues and observe all safety rules. *6.0* f. Understand career awareness, paths and strategies for employment. *3.0 all* g. Understand and adapt to changing technology. *4.0* h. Understand and prepare for employment (resume, job application, job interview, portfolio development). *3.6* i. Shop Safety *6.1, C1.0, C2.0 (all)* j. Shop Procedure *6.1, C2.5, C2.7* k. Tools *6.3, C2.0*	Responsible Individual Interpersonal Learners Effective Communicators Technological Producers Problem Solvers	- Lecture - Class Discussion - Individual and Group Practice - Tests and Quizzes - Assignments and worksheets - Portfolio development	10 Year 1 and 2 30 Year 1 and 2	Language Arts (8) R 1.3, 2.6 W1.3, 2.5. LC 1.4,1.5, 1.6 LS1.2, 1.3, 1.7 (9/10) R2.1,2.3,2.6; W2.5; LC1.4; LS 1.1, 2.3; (11/12) R2.3; W2.5; LC1.2 Math (7) ; NS1.2, 1.3, 1.7 ; MR 1.1,1.3,2.1, 2.7,2.8, 3.1 CAHSEE Lang. Arts R 8.2.1 (9/10), R 2.1, 2.3; W2.5; Math (7) NS 1.2, 1.3, 1.7 MR 1.1, 2.1, 3.1
TOTAL HOURS			360	