

|  | Class | Lab | Clinic | Work | Credit |
|--|-------|-----|--------|------|--------|
|--|-------|-----|--------|------|--------|

Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish, and to demonstrate cultural awareness. *This course has been approved for transfer under the Comprehensive Articulation Agreement as a general education course in Humanities/Fine Arts.*

|                |                                  |   |   |   |   |   |
|----------------|----------------------------------|---|---|---|---|---|
| <b>SPA 120</b> | <b>Spanish for the Workplace</b> | 3 | 0 | 0 | 0 | 3 |
|----------------|----------------------------------|---|---|---|---|---|

Prerequisites: None  
Corequisites: None

This course offers applied Spanish for the workplace to facilitate basic communication with people whose native language is Spanish. Emphasis is placed on oral communication and career-specific vocabulary that targets health, business, and/or public service professions. Upon completion, students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity.

|                |                                |   |   |   |   |   |
|----------------|--------------------------------|---|---|---|---|---|
| <b>TRN 110</b> | <b>Intro to Transport Tech</b> | 1 | 2 | 0 | 0 | 2 |
|----------------|--------------------------------|---|---|---|---|---|

Prerequisites: None  
Corequisites: None

This course covers workplace safety, hazardous materials, environmental regulations, hand tools, service information, basic concepts, vehicle systems, and common transportation industry terminology. Topics include familiarization with major vehicle systems, proper use of various hand and power tools, material safety data sheets, and personal protective equipment. Upon completion, students should be able to demonstrate appropriate safety procedures, identify and use basic shop tools, and describe government regulations regarding transportation repair facilities.

|                |                                   |   |   |   |   |   |
|----------------|-----------------------------------|---|---|---|---|---|
| <b>TRN 111</b> | <b>Chassis Maint/Light Repair</b> | 2 | 6 | 0 | 0 | 4 |
|----------------|-----------------------------------|---|---|---|---|---|

Prerequisites: None  
Corequisites: None

This course covers maintenance and light repair of transportation suspension, steering, and brake systems. Topics include general servicing and inspection procedures of steering and suspension systems, wheels and tires, and drum and disc brakes including hydraulic and power-assist units. Upon completion, students should be able to perform maintenance and light repair of transportation suspension, steering, and brake systems.

|                |                                      |   |   |   |   |   |
|----------------|--------------------------------------|---|---|---|---|---|
| <b>TRN 112</b> | <b>Powertrain Maint/Light Repair</b> | 2 | 6 | 0 | 0 | 4 |
|----------------|--------------------------------------|---|---|---|---|---|

Prerequisites: TRN 111  
Corequisites: None

This course covers maintenance and light repair of transportation engines, automatic and manual transmission/transaxles, engine performance systems, and HVAC systems. Topics include general servicing and inspection procedures of engines, engine lubrication and cooling systems, automatic and manual transmission/transaxles, HVAC components, and fuel, air induction, and exhaust systems. Upon completion, students should be able to perform maintenance and light repair of transportation engines, automatic and manual transmission/transaxles, engine performance systems, and HVAC systems.

|                |                                 |   |   |   |   |   |
|----------------|---------------------------------|---|---|---|---|---|
| <b>TRN 120</b> | <b>Basic Transp Electricity</b> | 4 | 3 | 0 | 0 | 5 |
|----------------|---------------------------------|---|---|---|---|---|

Prerequisites: TRN 112  
Corequisites: None

This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

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|---|-------|-----|--------|------|--------|
| <b>TRN 140 Transp Climate Control</b>   | 1     | 2   | 0      | 0    | 2      |
| Prerequisites: TRN 112  |       |     |        |      |        |
| Corequisites: None  |       |     |        |      |        |
| This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis and repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to diagnose and repair vehicle climate control systems.  |       |     |        |      |        |
| <b>TRN 140A Transp Climate Control Lab</b>  | 1     | 2   | 0      | 0    | 2      |
| Prerequisites: TRN 112  |       |     |        |      |        |
| Corequisites: TRN 140   |       |     |        |      |        |
| This course provides experiences for enhancing student skills in the diagnosis and repair of transportation climate control systems. Emphasis is placed on reclaiming, recovery, recharging, leak detection, climate control components, diagnosis, air conditioning equipment, tools and safety. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.   |       |     |        |      |        |
| <b>TRN 145 Adv Transp Electronics</b>   | 2     | 3   | 0      | 0    | 3      |
| Prerequisites: TRN 120  |       |     |        |      |        |
| Corequisites: None  |       |     |        |      |        |
| This course covers advanced transportation electronic systems including programmable logic controllers, on-board data networks, telematics, high voltage systems, navigation, collision avoidance systems and electronic accessories. Topics include interpretation of wiring schematics, reprogramming PLCs, diagnosing and testing data networks and other electronic concerns. Upon completion, students should be able to reprogram PLCs, diagnose and test data networks and other electronic concerns, and work safely with high voltage systems. |       |     |        |      |        |
| <b>WBL 110 World of Work</b>  | 1     | 0   | 0      | 0    | 1      |
| Prerequisites: None   |       |     |        |      |        |
| Corequisites: None  |       |     |        |      |        |
| This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethics, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work.   |       |     |        |      |        |
| <b>WBL 111 Work-Based Learning I</b>  | 0     | 0   | 0      | 10   | 1      |
| Prerequisites: None   |       |     |        |      |        |
| Corequisites: None  |       |     |        |      |        |
| This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.  |       |     |        |      |        |
| <b>WBL 112 Work-Based Learning II</b>   | 0     | 0   | 0      | 20   | 2      |
| Prerequisites: None   |       |     |        |      |        |
| Corequisites: None  |       |     |        |      |        |
| This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.  |       |     |        |      |        |