**Amarillo College Curriculum Map Template**

**Division:** Technical Education **Degree/Academic Program(s):** Diesel (DEMR.CERT; DEMR.CERT.DT)
**Person Responsible for Division:** Megan Eikner, Dean

**Person Responsible for Area/Title:** Billy Barclay, Derek Lyon **Component Director/Chair:** Brian Jacob **Submission Date:** Fall 2015 **Purpose Statement:** The mission of the Diesel program is to prepare students for entry level employment by educating through the use of classroom technology and hands on skills demonstration-practice needed to succeed.

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| **Goal #1:** The Diesel program will prepare students to demonstrate their analytical skills to a level high enough to take and pass the Diesel portion of the Automotive Service Excellence (ASE) certification exams. |
| **Program-Specific Courses** | **PLO #1:** The student will utilize precision instruments to diagnose and repair basic engine systems. | **PLO #2:** The student will perform advanced diagnosis using specialized testing equipment and procedures; evaluate components using visual and standard testing procedures; and reclaim refrigerants using approved standards and equipment. | **PLO #3:** The student will evaluate component failures and interpret transmission power flow concepts. | **PLO #4:** The student will interpret technical manuals and identify and test sensors and actuator circuits. | **PLO #5:** The student will apply advanced brake information with emphasis on diagnostics and component relationships. |
| **DEMR 1321 Power Train I** |  |  | **D** |  |  |
| **DEMR 1347 Power Train II** |  |  | **D** |  |  |
| **DEMR 1329 Prev. Maint.** |  |  |  |  |  |
| **DEMR 1406 Diesel Eng. I** | **I, D** |  |  |  |  |
| **DEMR 2412 Diesel Eng. II** | **I, D** |  |  |  |  |
| **DEMR 2331 Adv. Brake** |  |  |  |  | **D** |
| **DEMR 2432 Electronics** | **D** |  | **D** | **D** | **D** |
| **DEMR 2346 Adv. HVAC** |  | **D** |  |  |  |
| **AUMT 1305 Intro to Auto.** | **I** | **I** | **I** | **I** |  |

**I = Introduced; D = Developed & Practiced with Feedback; M = Demonstrated at Mastery**

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| **Goal #3:** To graduate students who apply the skills and knowledge they learn to actual situations |
| **Program-Specific Courses** | **PLO #1:**The student will identify, inspect, test and measure, and disassemble and reassemble engine parts. | **PLO #2:** The student will perform HVAC diagnosis using specialized testing equipment.  | **PLO #3:**The student will evaluate transmission component failures and repair power train components. | **PLO #4:** The student will utilize specialized tools to diagnose or change electronic parameters. | **PLO #5:** The student will apply advanced brake information with emphasis on diagnostics and component relationships and perform advanced brake repairs. |
| **DEMR 1321 Power Train I** |  |  | **I, D** |  |  |
| **DEMR 1347 Power Train II** |  |  | **I, D** |  |  |
| **DEMR 1329 Prev. Maint.** |  |  |  |  |  |
| **DEMR 1406 Diesel Eng. I** | **I, D** |  |  |  |  |
| **DEMR 2412 Diesel Eng. II** | **I, D** |  |  |  |  |
| **DEMR 2331 Adv. Brake** |  |  |  |  | **I, D** |
| **DEMR 2432 Electronics** |  |  |  | **I, D** |  |
| **DEMR 2346 Adv. HVAC** |  | **I, D,M** |  |  |  |
| **AUMT 1305 Intro to Auto.** | **I** | **I** | **I** | **I** |  |

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