



**DEPARTMENT OF AUTOMOTIVE AND PARTS
COURSE OUTLINE – FALL 2011 SEMESTER A
SEPTEMBER 12 – DECEMBER 16, 2011**

HA 131 WORKSHOP PRACTICES I – 12.5 CREDITS 210 HOURS

INSTRUCTOR: Ryan Peterson **PHONE:** 780.835.6733
Rob Young 780.835.6730
TBA

OFFICE: FTI 224 **E-MAIL:** RPeterson@GPRC.ab.ca
FTI 225 RYoung2@GPRC.ab.ca

OFFICE Monday through Friday.
HOURS: 8:00 – 8:30 a.m. and 4:00 – 5:00 p.m.

PREREQUISITE(S)/COREQUISITE: None.

REQUIRED TEXT/RESOURCE MATERIALS: None.

CALENDAR DESCRIPTION: This lab includes the safe use and care of hand and power tools, general workshop safety, safe vehicle handling and hoisting and safe workshop habits and conduct. Hydraulic brake inspection, repair and testing, as well as, basic anti-lock brake (ABS) testing and servicing are performed. Steering and suspension system testing, inspecting, repair and adjusting are performed. Electrical system testing and repair are covered in this course. Whenever possible, the students will work on vehicles which are in daily operation.

Delivery Option – Fairview Campus Only

CREDIT/CONTACT HOURS: 12.5 credits; 15 hours per week; 14 weeks; 210 hours.

DELIVERY MODE(S): Instructor led; hands on; project based.

OBJECTIVES:

Upon completion of this course the student will be able to:

1. Measure components using common measuring tools.
2. Correctly and safely use common specialty hand tools.
3. Practice workshop safety.
4. Diagnose service and repair drive lines including C-V joints.
5. Measure frames and identify damage.
6. Service and repair common suspension systems and steering linkages.
7. Diagnose faults and service wheels, tires and bearings.
8. Diagnose service and repair manual and power steering gears.
9. Perform 2 wheel, 4 wheel and thrust angle wheel alignments.
10. Service and repair steering columns and supplemental, inflatable, restraint (air bag) systems.
11. Diagnose steering and alignment problems.
12. Service and repair brake system hydraulic systems.
13. Diagnose service and repair Disc and Drum brake systems.
14. Diagnose and test a power brake system.
15. Perform brake flushing and bleeding procedures.
16. Perform tests to verify electrical system malfunctions.
17. Service, test, diagnose batteries.
18. Test and repair typical vehicle electrical circuits.
19. Use scan tools to test ABS and restraint systems.
20. Diagnose and service active and passive restraint systems.

TRANSFERABILITY: None.

GRADING CRITERIA: Students must complete all required courses with a grade point average of no less than 2.00 and no failing (F) grades. Pass mark of 65%.

| GRANDE PRAIRIE REGIONAL COLLEGE | | | |
|--|---------------------------|------------------------------|--|
| GRADING CONVERSION CHART | | | |
| Alpha Grade | 4-point Equivalent | Percentage Guidelines | Designation |
| A⁺ | 4.0 | 90 – 100 | EXCELLENT |
| A | 4.0 | 85 – 89 | |
| A⁻ | 3.7 | 80 – 84 | FIRST CLASS STANDING |
| B⁺ | 3.3 | 77 – 79 | |
| B | 3.0 | 73 – 76 | GOOD |
| B⁻ | 2.7 | 70 – 72 | |
| C⁺ | 2.3 | 67 – 69 | SATISFACTORY |
| C | 2.0 | 65 – 66 | |
| F | 0.0 | 60 – 64 | FAIL |
| F | 0.0 | 55 – 59 | |
| F | 0.0 | 50 – 54 | |
| F | 0.0 | 0 – 49 | |
| WF | 0.0 | 0 | FAIL, withdrawal after the deadline |

EXAMINATIONS: Project evaluations based on Rubric 1 – 5.

- 1 – cannot do
- 2 – can do with continuous help
- 3 – requires some help and extra time
- 4 – requires extra time but no help
- 5 – can do well enough to help others

STUDENT RESPONSIBILITIES:

Please refer to the Student Rights and Responsibilities policy in the Grande Prairie Regional College Calendar or at

www.gprc.ab.ca/downloads/documents/StudentRightsandResponsibilities.pdf.

STATEMENT ON PLAGIARISM AND CHEATING:

Please refer to

www.gprc.ab.ca/downloads/documents/Student%20Misconduct%20Plagiarism%20and%20Cheating.pdf regarding plagiarism, cheating and the resultant penalties. These are serious issues and will be dealt with severely.

COURSE SCHEDULE/TENTATIVE TIMELINE: 15 hours/week for 14 weeks in Semester A.