



DEPARTMENT OF HEAVY EQUIPMENT

THINKBIG SERVICE TECHNICIAN COURSE OUTLINE – WINTER 2017

FEBRUARY 27 – APRIL 21, 2017

HES221 VA23 – TRUCK AND TRAILER SUSPENSION AND STEERING

- 1.5 (48 HOURS)

INSTRUCTOR: Alan Hagen **PHONE:** 780.835.6737
OFFICE: FM4 101 **E-MAIL:** ahagen@gprc.ab.ca
OFFICE HOURS: By Appointment

PREREQUISITE(S)/COREQUISITE: Successful completion of Block 1 and HES190 work placement.

REQUIRED TEXT/RESOURCE MATERIALS:

Caterpillar Material

Caterpillar Service Industry

Unit 4: Connective Devices

Lesson 2 – Hoses and Seals

Lesson 3 – Bearings

**Alberta Apprenticeship and Industry Training Individual Learning Modules
Heavy Equipment Technician (HET)**

- 190102a – Frame and Suspension Fundamentals
- 190102b – Frame and Suspension ServiceAH
- 190102c – Bearings and Seals
- 190102d – Wheels, Tires and Hubs
- 190102e – Trailer Systems and Components
- 190102f – Coupling Units Fundamentals and Service
- 190102g – Landing Gear Fundamentals and Service
- 190102h – Orientation to Trailer Inspection
- 190102i – Preventive Maintenance

**Please see page 4
for tentative schedule**

CALENDAR DESCRIPTION: Topics covered in this course include: the fundamentals and servicing of truck and trailer frames and suspension; wheels, tires and hubs; trailer landing gear; coupling units; trailer types and an introduction to trailer inspection as directed by the Commercial Vehicle Inspection Program; oxy-fuel heating and cutting; and preventive maintenance.

Delivery Option: Fairview Campus Only

CREDIT/CONTACT HOURS: Credits: 1.5 / Contact Hours: 48.

DELIVERY MODE(S): Lecture and lab.

TRANSFERABILITY: None.

GRADING CRITERIA: Students must complete all required courses with a grade point average of no less than 2.7 and no failing (F) grades. A passing grade in this course is a **minimum of 70%.**

**Truck and Trailer Suspension and Steering..... 48 / 240 hours = 20 %
of Semester 2 mark**

Exams Average = _____ x 45%

Class Assignments/Quizzes = _____ x 30%

Shop Total _____ x 25%

HES221 VB23 FINAL MARK = _____ %

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	
F	0.0	67 – 69	FAIL
F	0.0	63 – 66	
F	0.0	60 – 62	
F	0.0	55 – 59	
F	0.0	50 – 54	
F	0.0	0 – 49	
WF	0.0	0	FAIL, withdrawal after the deadline

STUDENT RESPONSIBILITIES:

This is an adult education environment. Enrolment at Grande Prairie Regional College assumes that the student will become a responsible citizen of the College. As such, each student will display a positive work ethic, take pride in and assist in the maintenance and preservation of Institute property, and assume responsibility for his/her education by researching academic requirements and policies, demonstrating courtesy and respect toward others; and respecting instructor expectations concerning attendance, classroom and shop rules, safety, assignments, deadlines and appointments. Students are learning skills to prepare them for the work environment.

Following the guidelines in “Student Rights and Responsibilities” in the GPRC College calendar assist us all in maintaining an adult learning environment. 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:

Refer to the Student Conduct section of the GPRC Calendar at <http://www.gprc.ab.ca/programs/calendar/> Pages 44 to 46 or the College Policy on Student Misconduct: Plagiarism and Cheating at <http://www.gprc.ab.ca/about/administration/policies/>. **

**Note: all Academic and Administrative policies are available on the same page.

COURSE SCHEDULE/TENTATIVE TIMELINE:

- 190102a - Frame and Suspension Fundamentals
- 190102b - Frame and Suspension Service
- 190102e - Trailer Systems and Components
- 190102f - Coupling Units Fundamentals and Service
- 190102g - Landing Gear Fundamentals and Service - Wheels, Tires and Hubs
- 190102h - Orientation to Trailer Inspection
- 190102c - Bearings and Seals
- 190102d - Wheels, Tires and Hubs
- 190102i - Preventive Maintenance