



DEPARTMENT OF HEAVY EQUIPMENT
THINKBIG SERVICE TECHNICIAN COURSE OUTLINE – FALL 2014
SEPTEMBER 2 – OCTOBER 24, 2014
HES311 - ELECTRICAL CIRCUITS - 1.5 (40 HOURS)

INSTRUCTOR:	Rob Young Al Hagen Harry Frykas	PHONE:	780.835.6730 780.835.6737 780.835.6795
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OFFICE HOURS: 8.00am to 4.30pm

PREREQUISITE(S)/COREQUISITE: Successful completion of Semesters 1 and 2.

REQUIRED TEXT/RESOURCE MATERIALS:

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

- 190302dA – Off-Road Electrical Circuit Fundamentals – Part A
- 190302dB - Off-Road Electrical Circuit Fundamentals – Part B
- 190302e – Off-Road Electrical Circuit Service
- 190404aA – Truck Electrical Circuit Fundamentals – Part A
- 190404aB – Truck Electrical Circuit Fundamentals – Part B
- 190404b – Truck Electrical Circuit Service

CALENDAR DESCRIPTION: Truck and machine electrical and accessory circuits are examined in this course.

Delivery Option: Fairview Campus Only

CREDIT/CONTACT HOURS: Credits: 1.5 / Contact Hours: 40.

DELIVERY MODE(S): Lecture and lab components.

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%.

Electrical Circuits..... **40 / 240 hours = 16 %**
of Semester 3 mark

Exams Average = _____ **x 45%**

Class Assignments/Quizzes = _____ **x 30%**

Shop Total _____ **x 25%**

HES 311 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:

- Construct Functioning Circuits with Consideration to Function and Capacity
- HID Lighting
- HVAC Controls
- Entertainment Systems
- On Board Communication Circuits
- Monitoring Circuits and Systems