NORTHWESTERN POLYTECHNIC

DEPARTMENT OF INDUSTRY PARTNER TRAINING

THINKBIG SERVICE TECHNICIAN COURSE OUTLINE – WINTER 20*26*

HES221 VA22 – TRUCK AND TRAILER SUSPENSION AND STEERING –

1.5 CREDITS (3-0-3) 48 HOURS FOR 8 WEEKS

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation, and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land, and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTOR:	**Russell Hall**	**PHONE:**	780-835-6627
OFFICE:	FPS 110	**E-MAIL:**	rhall@nwpolytech.ca
OFFICE HOURS:	8 AM to 4:30 PM		

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.

PREREQUISITE(S):

COREQUISITE(S):

REQUIRED TEXT/RESOURCE MATERIALS:

Caterpillar Material

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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 Service

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

DELIVERY MODE(S):

In person – Onsite. This course is delivered in person at the NWP Fairview campus.

Note: NWP reserves the right to change the course delivery.

LEARNING OUTCOMES:

TRANSFERABILITY:

None.

GRADING CRITERIA:

Students must complete all required courses with no failing (F) grades. A passing grade in this course is a **minimum of 70%.** Grades for this course will be assigned as a percentage. Failure to achieve a minimum grade of 70% will result in withdrawal from the Think BIG program.

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EVALUATION:

Truck and Trailer Suspension and Steering **48 hours**

Exams Average =	_____	*x 45%*
Class Assignments /Quizzes =	_____	*x 30%*
Shop Total	_____	*x 25%*

FINAL MARK = _____ %

COURSE SCHEDULE/TENTATIVE TIMELINE:
Will be posted in the classroom.

STUDENT RESPONSIBILITIES:

This is an adult education environment. Enrolment at Northwestern Polytechnic assumes that the student will become a responsible citizen of NWP. 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. Non-academic misconduct, including the possession, use, or distribution of intoxicants, will be addressed through the Student Rights and Responsibilities policy.

Students are expected to attend all class and shop hours. Students who miss more than 21 hours or 3 days of classes may be removed from the course.

Absences will be monitored and recorded by the instructors.

- Upon reaching 7 hours missed time in a single semester the student will be required to meet with the instructor.

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- Upon reaching 14 hours missed time in a single semester the student will be required to meet with the instructor and program Chair.
- Upon reaching 21 hours missed time in a single semester the student will be required to meet with the program Chair, the Instructor and the Dean to evaluate the students' ability successfully continue in the Think BIG program.

Following the guidelines in "Student Rights and Responsibilities" in the NWP College calendar assist us all in maintaining an adult learning environment. Please refer to the Student Rights and Responsibilities policy in the Northwestern Polytechnic Calendar or at www.nwpolytech.ca/downloads/documents/StudentRightsandResponsibilities.pdf.

STATEMENT ON ACADEMIC MISCONDUCT:

Academic Misconduct will not be tolerated. For a more precise definition of academic misconduct and its consequences, refer to the Student Rights and Responsibilities policy available at https://www.nwpolytech.ca/about/administration/policies/index.html

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

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