NORTHWESTERN POLYTECHNIC

DEPARTMENT OF TRANSPORTATION TRADES

THINKBIG SERVICE TECHNICIAN COURSE OUTLINE – FALL 2022

OCTOBER 24 – DECEMBER 16, 2022

HES 110 VB12 INTRODUCTION TO CATERPILLAR SERVICE INDUSTRY

- 2.0 (56 HOURS)

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:	Peter Scheidegger	**PHONE:**	Office 780.835.6757
	Welding Instructor TBA		Cell 780.897.9298
OFFICE:	FPS 110	**E-MAIL:**	pscheidegger@nwpolytech.ca
OFFICE HOURS:	8 AM to 4:30 PM		

CALENDAR DESCRIPTION: This course will introduce the student to Caterpillar's history as well as familiarizing the student with the CAT product line. Included with this will be information on safety, materials and tools as well as shop facilities and equipment. Another segment of this will familiarize the student with the Caterpillar Service Information System as well as computer operation. The course will include an introductory section on welding in the welding lab on campus.

PREREQUISITE(S)/COREQUISITE: None

REQUIRED TEXT/RESOURCE MATERIALS:
Caterpillar Material

Caterpillar Service Industry

> *Unit 1: Cat History and Product Line Review*
>> Lesson 1:   Cat History and Product Line Review
>> Lesson 2:   Dealer Factory Network and Introduction to Cat Parts System
>
> *Unit 2: Shop Safety and Equipment*

Lesson 1:   Shop Safety and Equipment

Lesson 2:   Shop and Cleaning Equipment

Unit 3: Hand and Power Tools

Lesson 1:   Hand Tools

Lesson 2:   Power Tools

Lesson 3:   Precision Measuring Devices

Lesson 4:   Pulling Tools

Lesson 5: Lifting Tools

Caterpillar Service Industry continued . . .

Unit 4: Connective Devices

Lesson 1:   Fasteners

Lesson 2:   Hoses and Seals

Lesson 3:   Bearings

Unit 5: Hazardous Materials

Lesson 1:   Hazardous Materials

Lesson 2:   OSHA and EPA

Unit 6: Computer Operations

Lesson 1:   Introduction to DPC

Lesson 2:   Service Information Systems (SIS)

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

190101a –   Safety Legislation, Regulations and Industry Policy in the Trades

190101b –   Climbing, Lifting, Rigging and Hoisting

190101c –   Hazardous Materials and Fire Protection

190101d –   Communications and Trade Specific Safety

190101e –   Materials and Fastening Devices

190101f –   Hand, Shop and Power Tools

190101g –   Measuring Tools

190101h –   Oxyacetylene Equipment, Heating and Cutting

DELIVERY MODE(S): In person delivery.

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

COURSE OBJECTIVES:

LEARNING OUTCOMES:

TRANSFERABILITY: None.

EVALUATIONS:

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%.**

Introduction to Caterpillar Service Industry .... 56 / 240 hours = 24 %
of Semester 1 final mark

Exams Average = _____ **x 45%**

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

Shop Total _____ **x 25%**

HES 110 VB12 FINAL MARK = _____ %

Alpha Grade	4-point Equivalent	Percentage Guidelines		Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	90-100		C+	2.3	67-69
A	4.0	85-89		C	2.0	63-66
A-	3.7	80-84		C-	1.7	60-62
B+	3.3	77-79		D+	1.3	55-59
B	3.0	73-76		D	1.0	50-54
B-	2.7	70-72		F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

Introduction to Caterpillar Service Industry

- Caterpillar History

- Caterpillar Products

- Safety, Materials and Tools

- Shop Facilities

- Shop Equipment

- Computer Operation and Service Information System (SIS)

- Maintenance and Connective Devices

STUDENT RESPONSIBILITIES: This is an adult education environment. Enrolment at Northwestern Polytechnic 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 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 PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the Northwestern Polytechnic Calendar at https://www.nwpolytech.ca/programs/calendar/ or the Student Rights and Responsibilities policy which can be found at https://www.nwpolytech.ca/about/administration/policies/index.html.

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

Additional Information (Optional):