Heavy Equipment Operator

PLAR Candidate Guide

Prior Learning Assessment and Recognition (PLAR)

SASKATCHEWAN POLYTECHNIC

Tomorrow in the making.

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The Heavy Equipment Operator is dedicated to removing barriers and broadening the access to programs at Saskatchewan Polytechnic. We believe that adults acquire knowledge and skills through life and work experience that may align with courses within our programs.

Developed by program	March 2006			
Revised	September 2008	April 2014		
Web ready – PLAR office	May 2006	May 2014		
Revised template by RPL program	July 2012	January 2015		

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Why consider a PLAR assessment?

PLAR refers to the combination of flexible ways of evaluating people's lifelong learning, both formal and informal against a set of established standards. You can receive academic credit for your relevant lifelong learning. The Heavy Equipment Operator program recognizes prior learning in a number of ways.

We recognize:

- Previous formal learning from an accredited training institution through transfer of credit.
- Previous informal learning or experiential learning through a comprehensive prior learning assessment and recognition process.

What are the PLAR options?

To be eligible for PLAR, an applicant must first register or already be registered as a Saskatchewan Polytechnic student.

The Heavy Equipment program is offered as a work based training program. Candidates who wish to complete a PLAR challenge within this program must challenge the total certificate program. The total program challenge consists of two mandatory theory courses and two electives from the speciality courses. Once candidates have completed the total certificate program challenge, it is possible to challenge additional speciality courses. Additional PLAR challenges will include additional assessment fees.

Option A: Program Level Certification

Eligibility criteria:

- Completed 1,000 or more hours of recent (within the past 5 years) successful experience in the heavy equipment operator industry.
- HEO program head will validate your work hours with your employers.

Fees

- $1000 fee for whole program challenge; $500 fee for each additional piece of equipment.
- For a listing of the specific PLAR fees in the PLAR database, check the PLAR database or call Saskatchewan Polytechnic and ask to speak to the Heavy Equipment Operator program head at 1-306-775-7484. You may call Saskatchewan Polytechnic's toll free number at 1-866-467-4278 and ask to speak to the program head of the Heavy Equipment Operator Program.

Option B: Individual Course Challenge

Once you have completed the total certificate program challenge, you may apply to be assessed for additional speciality courses. You must have 1,000 or more hours of successful experience in the heavy equipment operator field, and have learned the skills and knowledge for the selected Heavy Equipment Operator speciality course.

Fees:

- There will be a charge for each individual course assessment.

  For a listing of the specific PLAR fees in the PLAR database, check the PLAR database or call Saskatchewan Polytechnic and ask to speak to the Heavy Equipment Operator program head at 1-306-775-7484. You may call Saskatchewan Polytechnic's toll free number at 1-866-467-4278 and ask to speak to the program head of the Heavy Equipment Operator Program.

How many courses can be challenged through PLAR in the Heavy Equipment Operator program?

Currently we have 10 out of 10 certificate courses with PLAR challenges available. There is no limit. You may challenge as many of these courses as you are able to prove prior skills and knowledge through assessment.

Which courses are PLAR-ready?

Heavy Equipment Operator Program Profile			
COURSE CODE	**COURSE NAME**	**PLAR Challenge(s) *available* through program**	**PLAR Challenge(s) *not available***
Theory Courses		**	
HEOP 140	Construction Survey Specifications	✓	
SUPP 152	Heavy Equipment Operator	✓	
Specialty Courses			
HEOP 141	Motor Scraper	✓	
HEOP 142	Crawler Tractor	✓	
HEOP 143	Backhoe	✓	
HEOP 144	Motor Grader	✓	
HEOP 145	Front End Loader	✓	
HEOP 146	Skid Steer Loader	✓	
HEOP 148	Excavator	✓	
HEOP 156	Rock Truck	✓	

Note: Theory courses are common to all specialities. To earn a certificate, a student must complete both of the theory courses and pick two specialty courses.

For assistance call Saskatchewan Polytechnic and ask to speak to the Heavy Equipment Operator program head at 1-306-775-7484. You may call Saskatchewan Polytechnic's toll free number at 1-866-467-4278 and ask to speak to the Program head of the Heavy Equipment Operator Program.

Is PLAR available at any time of the year?

Please contact the Extension Education Consultant for Industrial programs at 775-7484 for PLAR availability times. The toll free number for Saskatchewan Polytechnic is 1-866-467-4278.

Is it *easier* to challenge a course through PLAR or take the course?

Neither is easier. By using PLAR you may reduce the repetition of studying information that you already know. The PLAR process allows you to demonstrate knowledge you already have.

PLAR is not an easy way to certification, rather a "different" way to obtain certification. Your personal level of skill and experience will dictate which courses you choose to challenge. The self-audit section found later in this guide will help you decide if you have a good match of skill and knowledge for a specific course.

Methods of assessing prior learning

Assessment methods measure an individual's learning against course learning outcomes. The assessment methods listed below are the ones most commonly used, but other forms of flexible assessment may be considered. These assessments may include one or a combination of the following assessment tools:

- challenge exam
- skill demonstration
- interview
- evidence or personal documentation files (providing evidence of learning from life and work experiences and accomplishments)
- validation of work experience (i.e. record of employment, validation letter on letter head from companies)

If I live out of town, do I have to travel to a main campus to do PLAR?

There will be times that you may need to meet with the program on campus. However, we will try to keep travel to a minimum. As the PLAR performance assessments are completed at a work site, the HEO program will work together with you in the selection of the work site. You may write the two written exams at the nearest Saskatchewan Polytechnic campus or at your locale. If you wish to complete the written exams for HEOP 140 and 152 at your own locale, you will be required to arrange for an exam proctor (See Appendix A). All other written exams will be administered by the HEO PLAR Assessor at the same time and place as the performance assessment.

What if I have a disability & need equity accommodations?

At Saskatchewan Polytechnic, we understand that sometimes services must be provided to students in a variety of ways to achieve the goals of fair representation. Therefore, the range of services provided for Education Equity students is as diverse as the needs of those students. We strive for equity (not uniformity) and provide varied services for students with differing needs. If more information is required, please contact a Saskatchewan Polytechnic counsellor at a campus closest to you or refer to the Saskatchewan Polytechnic website: http://saskpolytech.ca/student-services/support/counselling-services.aspx

Are there other methods to gain Saskatchewan Polytechnic course credits for prior learning?

Transfer Credit

Yes, Saskatchewan Polytechnic will grant credit for previous training that is similar in content, objectives, and evaluation standards to Saskatchewan Polytechnic training. Transfer of credit is different from the PLAR process. Transfer Credit guidelines may be found at: http://saskpolytech.ca/admissions/resources/transfer-credit.aspx

It is the student's responsibility to check with Registration Services for specific campus procedures on this policy. For specific information and guidelines regarding transfer of credit, contact a Saskatchewan Polytechnic educational counsellor.

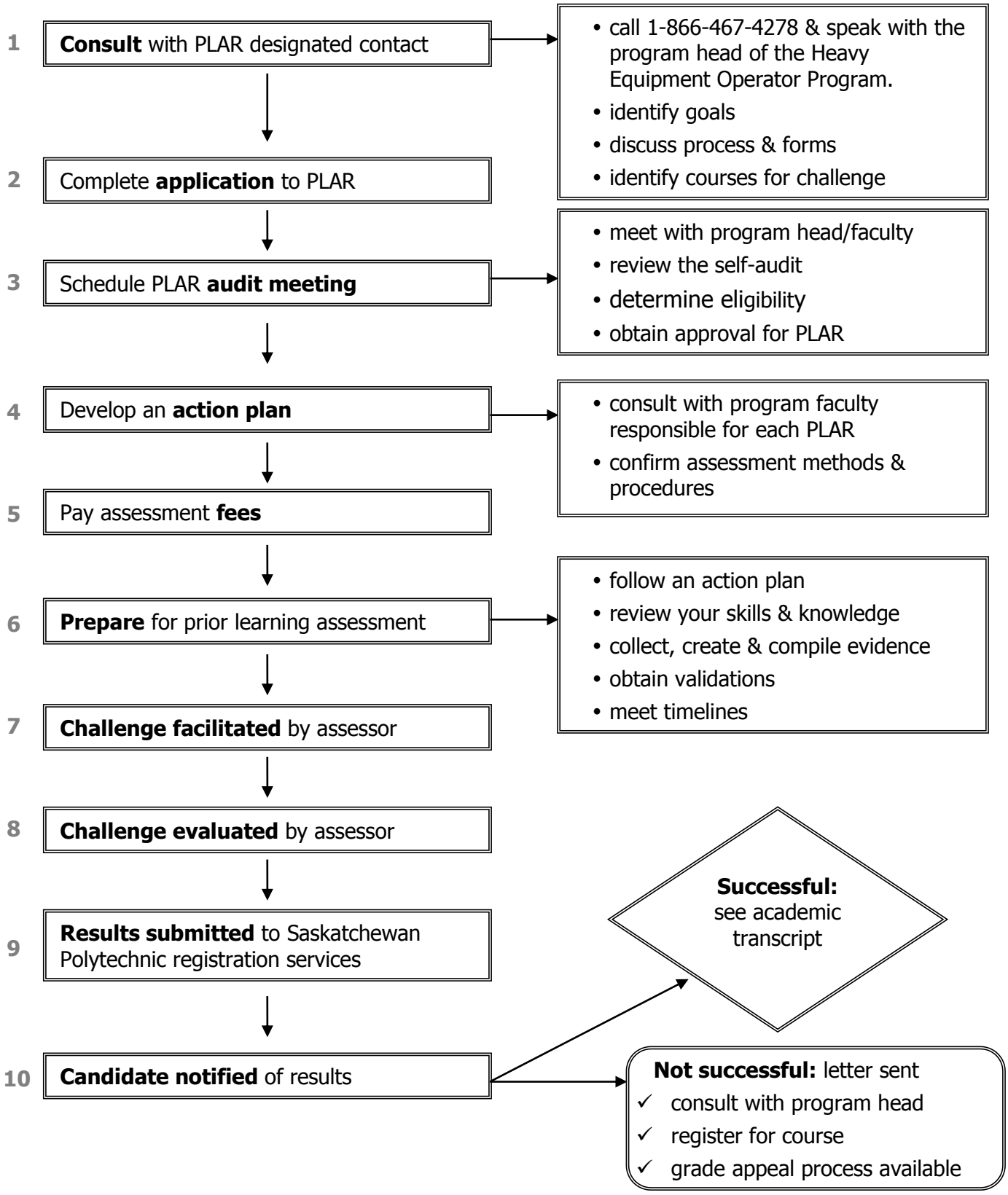
Equivalency Credit

Equivalency credit refers to the application of credit you may have earned in a previously taken Saskatchewan Polytechnic course to your current Saskatchewan Polytechnic course. Apply at registration services for *equivalency credit*. This process should also be completed prior to your PLAR challenge. If these credits cannot be used for *equivalency credit*, you may use these accredited courses as part of your evidence for your PLAR challenge.

Contact us

If more information is required, please contact the Heavy Equipment Operator program head at 1-306-775-7484. You may call Saskatchewan Polytechnic's toll free number at 1-866-467-4278 and ask to speak to the program head of the Heavy Equipment Operator Program.

Prior Learning Assessment and Recognition process



Guiding principles for developing a PLAR evidence file

As you begin the PLAR process you will be advised if any evidence is required. This will be identified in your action plan. Check with the PLAR designated contact **before** you begin to gather evidence.

Evidence must be valid and relevant. Your evidence must match the learning outcomes identified for each course.

- It is your responsibility to create, collect and compile relevant evidence – if required.

Learning must be current within the last 5 years.

The evidence should demonstrate the skills and knowledge from your experiences.

The learning must have both a theoretical and practical component.

Types of evidence

There are three types of evidence used to support your PLAR request:

Direct evidence – what you can demonstrate for yourself.
Indirect evidence – what others say or observe about you.
Self-evidence – what you say about your knowledge and experience.

Ensure that you provide full evidence to your Heavy Equipment Operator faculty assessor so that your prior learning application is assessed appropriately. Well organized, easy to track evidence will also ensure that none of the evidence is missed or assessed incorrectly.

Here are some examples of evidence that you may be requested to submit as part of your evidence file (if required):

- experience (activity) outlines
- workplace validations
- photos of environments
- employment records validating hours (i.e. records of employment)

All documents that are submitted to Saskatchewan Polytechnic may be returned to the student after the final results have been given and the grade appeal deadline of seven days has passed. A copy of transcripts and certificates may be included in your evidence file, but be prepared to show original documents at the PLAR audit meeting for validation.

How long will it take to prepare evidence for PLAR?

Since the requirements are different for each course, and each candidate has different experiences, the amount of time it takes to prepare your evidence will vary.

Steps to complete a self-audit

I. Read through the levels of competence as listed below.

Mastery:	I am able to demonstrate the learning outcome well enough to teach it to someone else.
Competent:	I can work independently to apply the learning outcome.
Functional:	I need some assistance in using the outcome.
Learning:	I am developing skills and knowledge for this area.
None:	I have no experience with the outcome.

Learning outcomes

For each learning outcome listed, please self-evaluate your competency levels and record in the appropriate column for each self-audit.

Take a few minutes and read through the following self-audit for each course you are interested in as a PLAR candidate.

Check your level of competence as you read through each of the learning outcomes for each course. The information will help you in your decision to continue with your PLAR application.

In order to be successful in a PLAR assessment, your abilities must be at the competent or mastery level for the majority of the learning outcomes. Some things to consider when determining your level of competence are:

- How do I currently use this outcome?
- What previous training have I had in this outcome: workshops, courses, on-the-job?
- What personal development or volunteer experience do I have in this area?

Be prepared to explain the reason you chose this level if asked by an assessor.

Bring the completed self-audit to a consultation meeting with the program head or faculty member in step 3 – PLAR process of the candidate process for prior learning assessment.

Self-audit guide(s)

SUPP 152 – Heavy Equipment Operator

Your studies will include the minimum training requirements of Saskatchewan Occupational Health and Safety's Power Mobile Equipment Table 14.1 for Operators.

Credit unit(s): 1.0

SUPP 152 – Heavy Equipment Operator **Mastery:** I am able to demonstrate it well enough to teach it to someone else. **Competent:** I can work independently to apply the outcome. **Functional:** I need some assistance in using the outcome. **Learning:** I am developing skills and knowledge for this area. **None:** I have no experience with the outcome.	**Mastery**	**Competent**	**Functional**	**Learning**	**None**
1. Demonstrate elements of personal, equipment, and worksite safety procedures and practices.					
▪ Describe power mobile equipment					
▪ Rights and responsibilities					
▪ Duties of employers and workers					
▪ Personal protective equipment (PPE)					
▪ Worksite safety evaluation					
▪ Signalling					
▪ Documentation and equipment checklists					
2. Demonstrate equipment orientation procedures.					
▪ identify equipment					
▪ Identify equipment tools					
▪ Identify equipment controls					
▪ Pre-Start check					
▪ Start, operational check, and perform operating adjustments					
▪ Shut Down, post operational check					
3. Demonstrate safe equipment operation.					
▪ Move equipment					
▪ Works equipment					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following way. Be prepared to discuss the expectations during a consultation meeting.

1. **Challenge exam – written**
   Multiple choice, approximately 36 questions, 60 minutes

   Refer to Appendix A for an exam invigilator form.

Resources

Once you have been approved for a PLAR challenge, the HEO program head will forward you the course manuals.

HEOP 140 – Construction Survey Specifications
You will learn to identify construction symbols and terms, check grades, install a culvert and identify road building stages.

Credit unit(s): 1.0

HEOP 140 – Construction Survey Specifications **Mastery:** I am able to demonstrate it well enough to teach it to someone else. **Competent:** I can work independently to apply the outcome. **Functional:** I need some assistance in using the outcome. **Learning:** I am developing skills and knowledge for this area. **None:** I have no experience with the outcome.	**Mastery**	**Competent**	**Functional**	**Learning**	**None**
1. Describe the basic elements of heavy equipment operation.					
▪ Identify the basic elements of heavy equipment operation					
▪ Describe properties of earth moving by heavy equipment					
2. Practice safety procedures.					
▪ Practice personal safety					
▪ Describe operational safety practice					
▪ Explain occupational health and safety regulations and procedures					
3. Use hand signals.					
▪ Describe hand signals for equipment operators					
4. Identify road construction stages, terms, signs, and staking.					
▪ Identify the road building stages and their purposes					
▪ Describe road construction term					
▪ Describe signs and flagging					
▪ Identify basic surveying methods					
▪ Demonstrate how to check the grade					
▪ Use an eye level					
5. Explain excavating to survey stakes.					
▪ Explain excavating to survey stakes					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. **Challenge test – written**
   Approximately 25 questions, 45 minutes

   Refer to Appendix A for an exam invigilator form.

Resources

Once you have been approved for a PLAR challenge, the HEO program head will forward you the course manuals.

HEOP 141 – Motor Scraper

You will learn to identify the components and controls, and discuss the purposes of a motor scraper. You will also receive hands on training in operating a motor scraper.

Credit unit(s): 5.0

HEOP 141 – Motor Scraper **Mastery:** I am able to demonstrate it well enough to teach it to someone else. **Competent:** I can work independently to apply the outcome. **Functional:** I need some assistance in using the outcome. **Learning:** I am developing skills and knowledge for this area. **None:** I have no experience with the outcome.	**Mastery**	**Competent**	**Functional**	**Learning**	**None**
1. Demonstrate preventative maintenance procedures.					
▪ Explain walk-around inspections					
▪ Explain start and shut-down procedures					
▪ Identify safety devices					
2. Describe the components of the motor scraper and their functions.					
▪ List the types of motor scrapers					
▪ Explain motor scraper components					
3. Demonstrate the motor scraper work cycle.					
▪ Describe the motor scraper work cycle					
▪ Identify loading procedures for twin engine scrapers					
▪ Identify production types for motor scraper work cycle					
▪ Identify procedures for roading scrapers					
▪ Excavate a variety of areas					
▪ Describe procedures for fill construction					
▪ Describe procedures for construction cut and fill slopes					
▪ Describe procedures for second grading					
▪ Identify production factors that affect second grading					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

2. Challenge exam – multiple choice written test – 30 questions – 45 minutes

3. Performance tests
Demonstrate the skills necessary to complete the Motor Scraper Work Cycle:

1. Walk around inspection – Check cooling, oil, air, fuel, & hydraulic systems, check transmission oil, wheels or undercarriage, electrical, gauges and lights.
   Mount machine correctly, check controls & gauges, check area, check fire extinguisher and cab for debris.
2. Conduct pre-operation procedures.
   Demonstrate correct starting procedures, safely move machine forward, safely park, lower all equipment, place controls in neutral, check all gauges, correctly shut down.
3. Road the scraper – move a scraper on public highway to desired location.
4. Excavate a borrow pit taking into consideration the terrain
5. Construct a cut slope

Resources

Once you have been approved for a PLAR challenge, the HEO program head will forward you the course manuals.

HEOP 142 – Crawler Tractor

You will learn to identify components and controls, and discuss the purposes of a crawler tractor. You will also receive hands-on training in operating a crawler tractor.

Credit unit(s): 5.0

HEOP 142 – Crawler Tractor **Mastery:** I am able to demonstrate it well enough to teach it to someone else. **Competent:** I can work independently to apply the outcome. **Functional:** I need some assistance in using the outcome. **Learning:** I am developing skills and knowledge for this area. **None:** I have no experience with the outcome.	**Mastery**	**Competent**	**Functional**	**Learning**	**None**
1. Demonstrate preventative maintenance procedures.					
▪ Explain walk-around inspections					
▪ Explain start and shut-down procedures					
▪ Identify safety devices					
2. Describe crawler tractor components and attachments.					
▪ Describe crawler tractor components and attachments					
▪ Locate crawler tractor controls					
3. Demonstrate the crawler tractor work cycle.					
▪ Describe the crawler tractor work cycle					
▪ Demonstrate push loading scrapers					
▪ Demonstrate rip materials					
▪ Pad wet sites					
▪ Describe clearing land					
▪ Demonstrate excavating and backfilling job sites					
▪ Describe production dozing procedures					
▪ Describe cut and fill slopes					
▪ Demonstrate procedures for operating the winch					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. **Challenge exam – written multiple choice – 30 questions – 45 minutes**

2. **Performance tests**
   Demonstrate the skills necessary to complete the Crawler Tractor Work Cycle:
   1. Walk around inspection – check cooling, air, fuel, & hydraulic systems; check engine and transmission oil; check under carriage and electrical.
   2. Inspect safety devices – check lights, rear for slow moving sign, condition of seat belt, required permits, check crawler tractor flags.
   3. Start-up and shut-down.
   4. Rip materials – Loosen material at the ground service by penetrating into and breaking up the ground material as the ripper is pulled behind the crawler.
   5. Pad a wet site – Place a layer of material over the top of unstable ground to enable weight of machines.
   6. Clear land – Use the crawler to clear land of vegetation.
   7. Cut a V-ditch – excavate a v-ditch for drainage.
   8. Perform production dozing – Perform a dozing technique (straight, angle or slot) according to assessor's directions.

Resources

Once you have been approved for a PLAR challenge, the HEO program head will forward you the course manuals.

HEOP 143 – Backhoe

You will learn to identify components and controls, and discuss the purposes of a backhoe. You will also receive hands on training in operating a backhoe.

Credit unit(s): 5.0
Prerequisites: SUPP 152 – Heavy Equipment Operator, HEOP 140 – Construction Survey Specifications

HEOP 143 – Backhoe **Mastery:** I am able to demonstrate it well enough to teach it to someone else. **Competent:** I can work independently to apply the outcome. **Functional:** I need some assistance in using the outcome. **Learning:** I am developing skills and knowledge for this area. **None:** I have no experience with the outcome.	**Mastery**	**Competent**	**Functional**	**Learning**	**None**
1. Describe the basic elements of heavy equipment operation.					
▪ Identify the basic elements of heavy equipment operation					
▪ Describe properties of earth moving by heavy equipment					
2. Describe components of the backhoe and their functions.					
▪ Describe backhoe components					
▪ Describe backhoe attachments					
▪ Locate Backhoe Controls					
▪ Describe loader attachments					
3. Perform work with the backhoe.					
▪ Demonstrate the Backhoe work cycle					
▪ Demonstrate excavating footings and basements					
▪ Demonstrate levelling an area					
▪ Demonstrate loading haul units					
▪ Demonstrate excavating trenches					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. **Challenge exam – written multiple choice – 30 questions – 45 minutes**

2. **Performance tests**
   Demonstrate the skills necessary to complete the Backhoe Work Cycle:
   1. Walk-around inspection
   2. Start-up and shut-down
   3. Levelling an area
   4. Load haul units
   5. Excavate a trench

Resources

Once you have been approved for a PLAR challenge, the HEO program head will forward you the course manuals.

HEOP 144 – Motor Grader

You will learn to identify components and controls, and discuss the purposes of a motor grader. You will also receive hands on training in operating a motor grader.

Credit unit(s): 5.0

HEOP 144 – Motor Grader **Mastery:** I am able to demonstrate it well enough to teach it to someone else. **Competent:** I can work independently to apply the outcome. **Functional:** I need some assistance in using the outcome. **Learning:** I am developing skills and knowledge for this area. **None:** I have no experience with the outcome.	**Mastery**	**Competent**	**Functional**	**Learning**	**None**
1. Demonstrate preventative maintenance procedures.					
▪ Explain walk-around inspections					
▪ Explain start and shut-down procedures					
▪ Identify safety devices					
2. Describe components of the motor grader and their functions.					
▪ Match motor grader components with their operation and functions					
▪ Match motor grader controls with their operation and function					
▪ Identify steering capabilities of the motor grader					
3. Demonstrate the motor grader work cycle.					
▪ Describe the motor grader work cycle and levelling					
▪ Demonstrate construction site maintenance and finishing a road					
4. Maintain public roads.					
▪ Perform road maintenance operations					
5. Demonstrate ditch construction.					
▪ Ditch construction					
▪ Cut a flat bottom ditch					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. **Challenge exam – written multiple choice – 30 questions – 45 minutes**

2. **Performance tests**
   Demonstrate the skills necessary to complete the Motor Grader Work Cycle:
   1. Walk-around inspection
   2. Start-up and shut-down
   3. Levelling an area
   4. Basic road maintenance
   5. Cut a v-ditch
   6. Cut a flat bottom ditch

Resources

Once you have been approved for a PLAR challenge, the HEO program head will forward you the course manuals.

HEOP 145 – Front End Loader

You will learn to identify components and controls, and discuss the purpose of a front end loader. You will also receive hands on training in operating a front end loader.

Credit unit(s): 5.0

HEOP 145 – Front End Loader **Mastery:** I am able to demonstrate it well enough to teach it to someone else. **Competent:** I can work independently to apply the outcome. **Functional:** I need some assistance in using the outcome. **Learning:** I am developing skills and knowledge for this area. **None:** I have no experience with the outcome.	**Mastery**	**Competent**	**Functional**	**Learning**	**None**
1. Demonstrate preventative maintenance procedures.					
▪ Explain walk-around inspections					
▪ Explain start and shut-down procedures					
▪ Identify safety devices					
2. Describe front-end loader components and attachments.					
▪ Describe front end loader components					
▪ Describe front end loader attachments					
▪ Locate front end loader controls					
3. Perform work with the front end loader.					
▪ Describe the front end loader work cycle					
▪ Demonstrate the front end loader work cycle					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. **Challenge Exam – written multiple choice – 25 questions – 45 minutes**

2. **Performance test**
   Demonstrate the skills necessary to complete the front end loader work cycle:
   1. Walk around inspection
   2. Machine start-up and shut-down
   3. Level an Area
   4. Load Haul Units
   5. Apply the work cycle for the front-end loader

Resources

Once you have been approved for a PLAR challenge, the HEO program head will forward you the course manuals.

HEOP 146 – Skid Steer Loader

You will learn to identify components and controls, and discuss the purpose of a skid steer loader. You will also receive hands on training in operating a skid steer loader.

Credit unit(s): 5.0

HEOP 146 – Skid Steer Loader **Mastery:** I am able to demonstrate it well enough to teach it to someone else. **Competent:** I can work independently to apply the outcome. **Functional:** I need some assistance in using the outcome. **Learning:** I am developing skills and knowledge for this area. **None:** I have no experience with the outcome.	**Mastery**	**Competent**	**Functional**	**Learning**	**None**
1. Demonstrate preventative maintenance procedures.					
▪ Explain walk-around inspections					
▪ Explain start and shut-down procedures					
▪ Identify safety devices					
2. Describe components of the skid steer loader and their functions.					
▪ Describe skid steer loader components					
▪ Describe skid steer loader attachments					
▪ Locate skid steer loader controls					
3. Demonstrate preventative maintenance procedures.					
▪ Describe the skid steer loader work cycle					
▪ Demonstrate the skid steer loader work cycle					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

I. Challenge exam – written multiple choice – 25 questions – 45 minutes

II. Performance test
Demonstrate the skills necessary to complete the skid steer loader work cycle:

1. Walk around inspection
2. Machine start-up and shut-down
3. Level an Area
4. Construct a stockpile
5. Load haul units
6. Excavate a basement

Resources

Once you have been approved for a PLAR challenge, the HEO program head will forward you the course manuals.

HEOP 148 – Excavator

You will learn to identify components and controls, and discuss the purposes of an excavator. You will also receive hands-on training in operating an excavator.

Credit unit(s): 5.0

HEOP 148 – Excavator **Mastery:** I am able to demonstrate it well enough to teach it to someone else. **Competent:** I can work independently to apply the outcome. **Functional:** I need some assistance in using the outcome. **Learning:** I am developing skills and knowledge for this area. **None:** I have no experience with the outcome.	**Mastery**	**Competent**	**Functional**	**Learning**	**None**
4. Describe the basic elements of heavy equipment.					
▪ Describe the basic elements of heavy equipment					
▪ Describe properties of earth moving by heavy equipment					
5. Describe excavator components and attachments.					
▪ Describe excavator components					
▪ Describe excavator attachments					
▪ Locate excavator controls					
6. Demonstrate the excavator work cycle.					
▪ Demonstrate the excavator work cycle					
▪ Demonstrate excavating footings and basements					
▪ Demonstrate loading haul units					
▪ Demonstrate excavating trenches					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. **Challenge Exam** – **written multiple choice – 25 questions – 45 minutes**

2. **Performance test**

   Demonstrate the skills necessary to complete the excavator work cycle:

   1. Walk around inspection
   2. Machine start-up and shut-down
   3. Complete the excavator work cycle

Resources

Once you have been approved for a PLAR challenge, the HEO program head will forward you the course manuals.

HEOP 156 – Rock Truck

You will learn to identify components and controls and will discuss the purposes of a rock truck. You will also receive hands-on training in operating a rock truck.

Credit unit(s): 5.0
Prerequisites: HEOP 140, SUPP 152

HEOP 156 – Rock Truck **Mastery:** I am able to demonstrate it well enough to teach it to someone else. **Competent:** I can work independently to apply the outcome. **Functional:** I need some assistance in using the outcome. **Learning:** I am developing skills and knowledge for this area. **None:** I have no experience with the outcome.	**Mastery**	**Competent**	**Functional**	**Learning**	**None**
1. Demonstrate preventative maintenance procedures.					
▪ Explain walk around inspections					
▪ Explain start up and shut down procedures					
▪ Identify safety devices					
2. Describe rock truck types and uses.					
▪ Describe solid frame rock trucks (haul trucks)					
▪ Describe articulated rock trucks (wiggle wagons)					
3. Perform work with rock truck.					
▪ Driving the truck					
▪ Loading the truck					
▪ Unloading the truck					
▪ Negotiating grades					
▪ Haul roads					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. **Challenge Exam – written multiple choice – 40 questions – 60 minutes**

2. **Performance test**
   Demonstrate the skills necessary to work with rock truck:

   1. Walk around inspection
   2. Machine start-up and shut-down
   3. Driving the truck
   4. Loading the truck
   5. Unloading the truck
   6. Negotiating grades

Resources

Once you have been approved for a PLAR challenge, the HEO program head will forward you the course manuals.

Heavy Equipment Operator

Appendices

Appendix A – Exam invigilator form

EXAM INVIGILATOR FORM FOR
PRIOR LEARNING ASSESSMENT

Please fill in and return the following information with exams to your Saskatchewan Polytechnic contact (Jim Marcia, Saskatchewan Polytechnic Regina Campus, 4500 Wascana Parkway, P.O. Box 556, Regina SK, S4P 3A3).

The exam supervisor should be a professional (teacher, RCMP, RN, secretary, clergy, etc.) and must be a <u>non-relative</u>.

<u>EXAM SUPERVISOR</u>

Name: _____

Address: _____

_____

_____

Postal Code: _____

Occupation: _____

Place of employment: _____

Business phone: _____

Home phone: _____

<u>Student's name</u>: (please print) _____

Note: Please validate student's identity. After validation, please enter your signature.

_____
Signature of exam supervisor

_____
List course