

Combined Laboratory and X-Ray Technology Diploma

PLAR Candidate Guide (Partial)

Prior Learning Assessment and Recognition (PLAR)

Copyright

No part of the work(s) contained herein may be reproduced or copied in any form or by any means – graphic, electronic, or mechanical, including photocopying, recording, taping of information and retrieval systems – without written consent of Saskatchewan Polytechnic.

Prior learning credit options at Saskatchewan Polytechnic

See Get Credit for What you Know for important information about all options to get credit for prior learning at Sask Polytech, including PLAR, transfer credit, Canadian Armed Forces credit, and equivalency credit.

How to navigate this document

This document contains links to other document sections or webpages. To return to where you were from another section in this document, press the *ALT* key and *left arrow* key at the same time. To return to this webpage from another webpage, close the other webpage or click back on the browser tab for this document.

Contents of this guide

This guide contains the following specific PLAR information and tools for this program

- A. PLAR fees
- B. PLAR eligibility and options
- C. Dates when PLAR assessment is available
- D. Special directions for this program
- E. PLAR contact person
- F. Self-rating course outlines

A. PLAR fees

Fees for PLAR challenges are set to cover our costs for consultation, assessment, and related administrative tasks. PLAR fees are non-refundable and non-transferrable.

The PLAR fees policy is subject to change for each new academic year. Please see the **Cost** section on the PLAR webpage for current fee information.

B. PLAR eligibility and options

To be eligible for PLAR for courses in this program, you must first apply for admission and be accepted into the program. You must also consult with the <u>PLAR contact person</u> and be approved for PLAR assessment.

C. Dates when PLAR assessment is available

PLAR assessment for this program is available from Sept 1 to June 15 in each academic year.

All PLAR assessments must be completed by June 15 of each academic year.

D. Special directions for this program

- 1. **Review** the PLAR process and FAQs and the information in this guide.
- 2. **Self-rate** your learning for each course using the Course Outlines in this guide.
- 3. **Consult** with the PLAR contact person for PLAR approval. Be prepared to provide your resume, course self-ratings (see section F), and a partially completed PLAR application. If you are approved for PLAR, the contact person will sign your PLAR application and explain next steps.
- 4. Apply for admission to the program. See directions for applying.
- 5. **Register** for PLAR at <u>Registration/Enrolment Services</u> once you have signed approval on your PLAR Application Form. The PLAR fee will be added to your student account.
- 6. **Finalize** an assessment plan with your assigned assessor.
- 7. **Complete** assessment before your PLAR registration expires.

E. PLAR contact person

Contact one of the Program Heads below to arrange a consultation **after** you have read this guide and **general PLAR** information **and** rated yourself for each course (see next section). Consultation may be by phone, online, or in person. Be prepared to provide your resume, course self-ratings, and a partially completed PLAR application. If agreement is reached to go ahead with PLAR, the contact person will sign approval on your PLAR application and explain the next steps. Admission to the program is required before you can register for PLAR.

Rebecca Friesen, Program Head

School of Health Sciences—Medical Diagnostic Program Saskatchewan Polytechnic, Saskatoon Campus

Phone: 306-659-4106

Email: friesen2236@saskpolytech.ca

F. Self-rating course outlines

Clicking on a course code below opens a page where you can rate yourself on the knowledge and skills assessed for PLAR credit. For Arts & Sciences courses, clicking on the course code opens another PLAR guide. The PLAR contact person for this program will refer you to another person to discuss PLAR for courses delivered by Arts & Sciences or another program/department.

COURSE CODE	COURSE NAME	Delivered by another department/program
<u>APHY 191</u>	Anatomy and Physiology 1	
<u>APHY 282</u>	Anatomy and Physiology 2	
ECRD 180	Electrocardiography	
ETHC 185	Professional Practices 1	
ETHC 280	Professional Practices 2	
<u>IMMU 183</u>	Immunology	
INFC 180	Infection Control and Safety	
MTER 180	Medical Terminology	
PROC 180	General Laboratory Practice	
PROC 181	Specimen Collection and Handling	
RGAN 180	Radiographic Anatomy	
	Semester 1	
PATH 179	Radiographic Pathology 1	
QC 193	Best Practices in Point of Care Testing	
RDBG 184	Radiobiology and Protection	
	Semester 2	
<u>CLIN 198</u>	Clinical ECG	

APHY 191 - Anatomy and Physiology 1

You will explore the structure and function of organs and systems in the normal human body. Your studies will focus on the integumentary, skeletal, muscular, nervous and endocrine systems.

Credit unit(s):3.0Prerequisites:noneCorequisites:noneEquivalent course(s):none

Use	a checkma	rk (P) to rate yourself as follows for each learning outcome	ı,		
	npetent: rning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Describe th	ne structural organization of the human body.			
2.	Describe th	e chemical level of organization of the human body.			
3.	Describe th	ne cellular level of organization of the human body.			
4.	Describe th	e tissue level of organization of the human body.			
5.	Describe th	e structure and function of the skeletal system.			
6.	Describe th	e structure and function of the nervous system.			
7.	Describe th	e structure and function of the endocrine system.			
8.	Describe th	e structure and function of the muscular system.			
9.	Describe th	ne structure and function of the integumentary system.			

APHY 282 - Anatomy and Physiology 2

Building on the knowledge gained in APHY 191 (Anatomy and Physiology 1), you will continue your study of the structure and function of the normal human body. Your studies will focus on the cardiovascular, immune, respiratory, digestive, urinary, and reproductive systems.

Credit unit(s): 3.0

Prerequisites: APHY 191
Corequisites: none
Equivalent course(s): none

	ark (P) to rate yourself as follows for each learning outcome	t		
Competent: Learning: None:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	a u o N
1. Describe	the structure and function of the cardiovascular system.			
2. Describe	the structure and function of the immune system.			
3. Describe	the structure and function of the respiratory system.			
4. Describe	the structure and function of the digestive system.			
5. Describe	the structure and function of the urinary system.			
6. Describe	the structure and function of the reproductive system.			

ECRD 180 - Electrocardiography

Your studies will focus on the theoretical aspects required to perform electrocardiograms. The course content includes recording techniques, recognizing artifacts, and identifying remedies to minimize them, and recognizing basic cardiac arrhythmias.

Credit unit(s):3.0Prerequisites:noneCorequisites:noneEquivalent course(s):none

Osc a checking	ark (P) to rate yourself as follows for each learning outcome	npetent .		
Competent: Learning: None:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	Q C N
1. Describe t	he structure and function of the heart.			
2. Explain le	ad theory and cardiac monitoring.			
3. Perform a	n ECG.			
4. Identify a	systematic approach to 12-lead ECG assessments.			
	normal sinus rhythm to abnormal rhythms or ECG changes which require the s attention.			
6. Recognize	appropriate and inappropriate electronic pacemaker function.			
7. Identify o	ther cardiac devices and diagnostic procedures.			

ETHC 185 - Professional Practices 1

You will receive an introduction to health care and health care delivery systems. You will study the legal and ethical issues faced by health care professionals. You will discuss interpersonal and employability skills required in health care professions with an emphasis on teamwork, communication and stress management. You will learn methods to deal with grief and loss, in addition to skills and techniques for critical thinking and conflict management.

Credit unit(s):3.0Prerequisites:noneCorequisites:noneEquivalent course(s):none

Use	a checkma	rk (P) to rate yourself as follows for each learning outcome	+		
1	npetent: rning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Describe h	ealth and health care delivery.			
2.	Describe le	gal and ethical issues in health care.			
3.	Describe et	fective employability skills required in health care professionals.			
4.	Describe in	terpersonal communication.			
5.	Explain hov	w to facilitate communication with individuals having diverse needs.			
6.	Demonstra	te critical thinking skills.			
7.	Describe st	ress and stress management strategies.			
8.	Describe th	ne methods used when dealing with grief and loss.			
9.	Analyze the	e components of conflict and techniques for conflict management.			

ETHC 280 - Professional Practices 2

You will study health care organizational behaviour and the skills required for leadership/management roles. You will discuss co-operative work relationships, conflict resolution, budgeting, strategic planning, the collective bargaining process, and workload measurements. You will develop workplace documents and demonstrate job search techniques.

Credit unit(s):2.0Prerequisites:noneCorequisites:noneEquivalent course(s):none

Use a checkma	rk (P) to rate yourself as follows for each learning outcome	ا بـ		
Competent: Learning: None:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1. Develop w	orkplace documents.			
2. Use effect	ve job search strategies.			
3. Describe c	o-operative working relationships.			
4. Describe t	ne qualities of a leader.			
5. Describe t	ne organizational functions of a manager.			
6. Discuss co	ncepts used in the health care workplace.			

IMMU 183 - Immunology

You will study the body's innate and acquired defense mechanisms. Your studies will focus on the involvement of the immune system in various disease states and clinical conditions. The course also provides an introduction to the principles of antigen-antibody reactions and their application in many laboratory tests.

Credit unit(s): 2.0

Prerequisites: MTER 180
Corequisites: none
Equivalent course(s): none

Use	e a checkma	rk (P) to rate yourself as follows for each learning outcome	±		
	mpetent: arning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Explain the	process of immunity.			
2.	Discuss the	principles of antigen-antibody interactions.			
3.	Discuss tes	t methods used to detect antigen-antibody reactions.			
4.	Discuss the	e pathophysiology of hypersensitivity reactions.			
5.	Discuss cor	mmon immunological disease states.			

INFC 180 - Infection Control and Safety

You will study the transmission of microorganisms, blood-borne pathogens (i.e. hepatitis virus and HIV), routine practices, isolation procedures, immunization for medical workers, sterilization and disinfection, biohazard waste, safety and WHMIS.

Credit unit(s):2.0Prerequisites:noneCorequisites:noneEquivalent course(s):none

Use	e a checkma	rk (P) to rate yourself as follows for each learning outcome	4		
	mpetent: irning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Demonstra	te the proper use of personal protective equipment.			
2.	Describe th	ne interaction between microbe and host.			
3.	Describe th	ne characteristics of microorganisms.			
4.	Describe th	ne blood-borne pathogens - Hepatitis and HIV.			
5.	Follow "Ro	utine Practices" and "Additional Precautions".			
6.	Recognize control.	sterilization and disinfection procedures as an essential part of infection			

MTER 180 - Medical Terminology

You will learn to use the prefixes, suffixes and combining forms from which medical terms are derived. You will also learn to use medical abbreviations.

Credit unit(s):1.0Prerequisites:noneCorequisites:noneEquivalent course(s):none

Use a checkma	rk (P) to rate yourself as follows for each learning outcome			
Competent: Learning: None:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1. Apply the	rules for construction and analysis of medical terms.			
2. Apply the	rules for using medical suffixes, combining forms and prefixes.			
3. Interpret	medical abbreviations.			

PROC 180 - General Laboratory Practice

You will receive the theory and practice required to perform basic procedures in a laboratory. The course content includes laboratory glassware, use of balances, centrifuges, thermal equipment, pH meters, microscopes, and solution preparation with related calculations.

Credit unit(s):2.0Prerequisites:INFC 180Corequisites:noneEquivalent course(s):none

Use a checkma	rk (P) to rate yourself as follows for each learning outcome	ا بـ ا	Learning	
Competent: Learning: None:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent		None
1. Demonstr	ate proper use of standard laboratory equipment.			
2. Perform ca	alculations necessary for reagent preparation and dilution.			
3. Demonstr	ate application of brightfield microscopy.			
4. Discuss ap	plication of other types of microscopy.			
5. Perform la	boratory practices in a safe manner.			
6. Prepare re	agents and standards for use in the laboratory.			

PROC 181 - Specimen Collection and Handling

You will learn how to collect, handle and transport various laboratory specimens to ensure the quality of laboratory results. The collection of blood specimens will be emphasized. You will practice venous collection on a variety of simulation training aids.

Credit unit(s):3.0Prerequisites:INFC 180Corequisites:noneEquivalent course(s):none

Use a checkma	ark (P) to rate yourself as follows for each learning outcome	<u> </u>		
Competent: Learning: None:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
Collect bl	ood samples by venipuncture.			
2. Manage t	he receipt, distribution, and storage of laboratory specimens.			
3. Collect bl	ood samples by capillary puncture.			
4. Explain the	e procedures for collecting and handling laboratory specimens other than			
5. Describe	the transportation of laboratory specimens.			

RGAN 180 - Radiographic Anatomy

Your studies will focus on identifying the skeletal, thoracic, abdominal and respiratory anatomy in radiographic images. Topographical anatomy will be discussed to aid in radiographic positioning.

Credit unit(s): 3.0

Prerequisites: MTER 180

Corequisites: APHY 191, APHY 282

Equivalent course(s): none

Use a	checkma	rk (P) to rate yourself as follows for each learning outcome			
Comp Learn None	•	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1. [Discuss th	e upper limb and shoulder girdle.			
2. [Discuss th	e lower limb and pelvic girdle.			
3. [Discuss th	e vertebral column.			
4. [Discuss th	e bony thorax and its joints.			
5. [Discuss th	e cranium and facial bones.			
6. [Discuss th	e chest and abdomen.			

PATH 179 - Radiographic Pathology 1

You will learn how to identify the pathological conditions of specific body systems as demonstrated on radiographs. At course completion, you will be able to use the required radiographic qualities to adequately illustrate the pathology in question.

Credit unit(s): 2.0

Prerequisites: RGAN 180
Corequisites: none
Equivalent course(s): none

Use a checkmark (P) to rate yourself as follows for each learning outcome		ا ـ			
	petent: ning: e:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Use medic	cal terminology.			
2.	Correlate	radiographic images to skeletal system pathology.			
3.	Correlate	radiographic images to respiratory system pathology.			
4.	Correlate	radiographic images to gastrointestinal and genitourinary systems pathology.			
5.	Correlate	radiographic images to hematopoietic system pathology.			
6.	Correlate	radiographic images to endocrine system pathology.			

QC 193 - Best Practices in Point of Care Testing

You will study roles and responsibilities of the health care team in point of care testing (POCT). You will learn steps necessary to implement POCT, principles of quality management and correlation of POCT results.

Credit unit(s):1.0Prerequisites:noneCorequisites:noneEquivalent course(s):none

Use a checkma	se a checkmark (P) to rate yourself as follows for each learning outcome			
Competent: Learning: None:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1. Describe t	he management of point of care testing (POCT) by the medical laboratory.			
2. Outline a	POCT Program.			
3. Apply qua	lity management (QM) principles in POCT.			

RDBG 184 - Radiobiology and Protection

You will be introduced to radiobiology and protection. You will acquire the knowledge and develop the skills needed to practice basic radiation protection during radiological examinations. The course content includes the biological effects of ionizing radiation, basic radiation protection principles and concepts, radiation monitoring, radiation protection guidelines and safety regulations, and techniques of minimizing patient dose during diagnostic imaging.

Credit unit(s):2.0Prerequisites:noneCorequisites:noneEquivalent course(s):none

Use a checkmark (P) to rate yourself as follows for each learning outcome		=		
Competent: Learning: None:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1. Describe	concepts and underlying principles of radiobiology.			
2. Describe	the significance of radiation doses.			
3. Describe	radiation protection concepts.			
4. Discuss m	ethods to reduce radiation exposure.			
5. Discuss ra	diation safety regulations.			
6. Identify s	tandards of safe installation, design, and use of x-ray equipment.			

CLIN 198 - Clinical ECG

You will participate in a supervised clinical experience at an assigned clinical site. Upon successfully completing this experience, you will be able to competently perform ECGs.

Credit unit(s): 2.0

Prerequisites: SIMU 280 or SIMU 100

Corequisites: none Equivalent course(s): none

Use a checkmark (P) to rate yourself as follows for each learning outcome		ا		
Compe Learnin None:		Competent	Learning	None
1. W	ork safely in electrocardiography (ECG).			
2. Co	onduct all workplace actions in a professional manner.			
3. Di:	splay communication skills in electrocardiography.			
4. De	emonstrate ability to work as part of the electrocardiography team.			
5. M	anage the testing and reporting of ECGs.			
	erform basic management functions required for the effective running of the ectrocardiography laboratory.			
	entify the need for adjustment to routine ECG procedure due to patient age or indition.			