

Medical Radiologic Technology Diploma

PLAR Candidate Guide

Prior Learning Assessment and Recognition (PLAR)

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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

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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
	Year 1	
<u>APHY 191</u>	Anatomy and Physiology 1	
<u>APHY 282</u>	Anatomy and Physiology 2	
ETHC 185	Professional Practices 1	
ETHC 280	Professional Practices 2	
INFC 180	Infection Control and Safety	
MTER 180	Medical Terminology	
PATH 179	Radiographic Pathology 1	
RDBG 184	Radiobiology and Protection	
RDGR 190	Fluoroscopy	
RDTM 280	Computed Tomography	
RDTM 281	Sectional Anatomy	
RGAN 180	Radiographic Anatomy	

COURSE CODE	COURSE NAME	Delivered by another department/program			
Year 2					
RSCH 280	Applied Investigation				

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

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 th	e structural organization of the human body.			
2. Describe th	e chemical level of organization of the human body.			
3. Describe th	e 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	e 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

	rk (P) to rate yourself as follows for each learning outcome	l 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 co
1. Describe t	he structure and function of the cardiovascular system.			
2. Describe t	he structure and function of the immune system.			
3. Describe t	he structure and function of the respiratory system.			
4. Describe t	he structure and function of the digestive system.			
5. Describe t	he structure and function of the urinary system.			
6. Describe t	he structure and function of the reproductive system.			

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	ا ب		
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 h	ealth and health care delivery.			
2. Describe le	gal and ethical issues in health care.			
3. Describe e	ffective employability skills required in health care professionals.			
4. Describe in	terpersonal communication.			
5. Explain ho	w to facilitate communication with individuals having diverse needs.			
6. Demonstra	te critical thinking skills.			
7. Describe s	ress and stress management strategies.			
8. Describe tl	ne methods used when dealing with grief and loss.			
9. Analyze th	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	ark (P) to rate yourself as follows for each learning outcome	ا بـ ا		
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 v	orkplace documents.			
2. Use effect	ive job search strategies.			
3. Describe	o-operative working relationships.			
4. Describe t	he qualities of a leader.			
5. Describe t	he organizational functions of a manager.			
6. Discuss co	ncepts used in the health care workplace.			

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 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. Define the	characteristics of microorganisms.			
2. Describe th	ne interaction between microbe and host.			
3. Describe in	nmunization and tuberculin testing.			
4. Describe th	ne blood-borne pathogens - Hepatitis and HIV.			
5. Follow "Ro	utine Practices" and "Additional Precautions".			
6. Describe st	erilization and disinfection procedures as an essential part of infection control.			
7. Describe sa	afety and WHMIS in the workplace.			

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	ا ب		
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 r	nedical abbreviations.			

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 checkm	ark (P) to rate yourself as follows for each learning outcome	۰		
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. Use medi	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.			

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

Ose a checkin	ark (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	he significance of radiation doses.			
3. Describe	adiation protection concepts.			
4. Discuss m	ethods to reduce radiation exposure.			
5. Discuss ra	diation safety regulations.			
6. Identify st	andards of safe installation, design and use of x-ray equipment.			

RDGR 190 - Fluoroscopy

You will learn how fluoroscopic equipment and related accessories function and operate. You will learn how to describe various fluoroscopic examinations within the department and in the surgical suite. You will also learn how to identify the radiographic appearance of organs and structures for various views and projections used in fluoroscopic examinations.

Credit unit(s):2.0Prerequisites:noneCorequisites:RDGR 180Equivalent 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. Discuss pr	inciples of fluoroscopy.			
2. Describe e	examinations of the digestive system.			
3. Discuss ex	aminations of the biliary system.			
4. Discuss ex	aminations of the genitourinary system.			
5. Discuss su	rgical radiography.			

RDTM 280 - Computed Tomography

You will learn about the history and development of computed tomography (CT) scanners. You will learn about the specialized equipment and accessories used for CT scanning. You will study the principles of acquisition, reconstruction, post-processing, and storage of CT images. You will learn about image quality, artifacts, and quality control procedures, as well as use of contrast media and radiation dose in CT.

Credit unit(s): 2.0

Prerequisites: IMRC 183, RSAP 180

Corequisites: none Equivalent course(s): none

Use	a checkma	rk (P) to rate yourself as follows for each learning outcome	Competent		
	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.		Learning	None
1.	Discuss pla	nar imaging and the historical background of computed tomography (CT).			
2.	Discuss the	e components of a CT system.			
3.	Discuss the	e operation of the CT unit.			
4.	Discuss CT	image formation and management.			
5.	Discuss CT	image characteristics and artifacts.			
6.	Discuss the	e use of contrast media in CT.			
7.	Discuss pa	tient dose as it relates to CT.			
8.	Discuss qu	ality control tests for CT.			

RDTM 281 - Sectional Anatomy

You will learn to identify the sectional anatomy of the head, neck, chest, abdomen, and pelvis on computed tomography (CT) and magnetic resonance imaging (MRI) images in transverse, coronal and sagittal planes. You will discuss topographical anatomy to aid in sectional anatomy and basic CT procedures.

Credit unit(s): 3.0

Prerequisites: APHY 282, RGAN 180

Corequisites: none Equivalent course(s): none

Use a checkmark (P) to rate yourself as follows for each learning outcome		ا ب		
Competen 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. Ident	fy anatomy of the extremities in transverse, coronal, and sagittal images.			
2. Ident	fy anatomy of the abdomen and pelvis in transverse, coronal, and sagittal images.			
3. Ident	fy thoracic anatomy in transverse, coronal, and sagittal images.			
4. Ident	fy anatomy of the head and neck in transverse coronal and sagittal images.			

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 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. 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	. Discuss the bony thorax and its joints.			
5. Discuss th	e cranium and facial bones.			
6. Discuss th	e chest and abdomen.			

RSCH 280 - Applied Investigation

You will receive an introduction to research concepts, methodologies, and issues in health. You will demonstrate the practical application of research techniques.

Credit unit(s): 1.0

Prerequisites: APHY 282, BIOL 181, CHEM 184, CHEM 288, ETHC 185, ETHC 280, HEMA 283, HEMA 188,

HEMA 189, HSTC 187, MICR 189, PATH 181, QC 193, QC 194, TRFS 182, SIMU 281

Corequisites: none Equivalent course(s): none

Use a checkmark (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.	Competen	Learning	None
1. Examine r	esearch concepts.			
2. Discuss ar	alysis and synthesis skills to resolve research challenges.			
3. Assess an	implementation plan.			