Master of Physician Assistant Studies Course Descriptions

Fall Term Courses:

PHAC 7230  Fundamentals in Pharmacology for Health Care I  Credit Hrs: 6
This course will build on foundational knowledge of human physiology and examine basic pharmacokinetic (drug metabolism) and pharmacodynamics (drug action) principles of specific drug classes related to the autonomic nervous system, cardiovascular system (edema, hypertension, arrhythmia, angina, blood clotting, heart failure, hyperlipidemia), diabetes, thyroid, inflammation and pain. Remaining major drug classes will be covered in PHAC 7240. Course delivery will involve lectures followed by clinical case-based tutorials.

PAEP 7000  Physiology & Pathophysiology for Physician Assistants I  Credit Hrs: 3
The goal of Physiology and Pathophysiology PAEP 7000 and 7002 is to provide the Physician Assistant-Learner a foundation of Basic Medical Science that they use to develop and base their further clinical knowledge upon. Traditionally, the study of pathology is divided into general pathology, the basic reactions of cells and tissues to injurious stimuli, and systemic pathology, which focuses on specific disease processes by organ system. After starting off with general overview lectures on basic pathologic processes and neoplasia, we will begin covering systemic pathology to include causes (or etiology); Mechanism of development (pathogenesis); Structural alterations produced in cells and organs (morphologic changes); and functional consequences of these changes and their natural history (pathophysiology and clinical significance).

PAEP 7010  Human Anatomy for Physician Assistants  Credit Hrs: 3
Human Anatomy for the PA consists of didactic lectures and laboratory sessions. The structure and organization of the course is based on a regional approach to the study of the body. Functional aspects of human anatomy are integrated with structure. The clinical importance of anatomical relationships will be introduced wherever appropriate. Laboratory sessions provide an opportunity to view body structures and their relationships in three dimensions. These exercises re-enforce the lecture material and open up a different dimension of learning. During the laboratory sessions, students will examine pre-dissected human cadaveric specimens and view models relating to the structures discussed in the lectures.

PAEP 7030  Professional Studies for Physician Assistants  Credit Hrs: 3
Based on the National Competencies Profile for Physician Assistants, Professional Studies for Physician Assistants is designed to provide students an introduction to the role and culture of their profession. This three credit course is divided into three subject areas: **Informatics** aims to provide the modern tools required to locate, evaluate and make use of medical literature in answering clinical questions. **Bioethics** provides an introduction to the principles of medical bioethics as well as some of the major bioethical issue observed in the clinical environment. **PA Culture** will address the legal aspects of the Physician Assistant role in Canada, the interactions between various stakeholders in providing patient care, and understand the unique culture and history of the profession.
PAEP 7042  Biochemistry for Physician Assistants  Credit Hrs: 1
Biochemistry for Physician Assistants provides an introductory and primarily a review into the chemical processes and substances occurring in living things. The study of life in its chemical processes, biochemistry is both a life science and a chemical science as it explores the chemistry of living organisms and the molecular basis for the changes occurring in living cells. This course is aimed towards establishing a baseline of knowledge to support the PAEP curriculum. The course is delivered through a combination of lectures and tutorials. Case studies and reviews will occur to support the material.

PAEP 7045  Research & Clinical Practice for Physician Assistants  Credit Hrs: 1
Research is fundamental to the development of knowledge and practice in the health professions. Health professionals must be able to support, participate in, apply and evaluate research findings related to their practice and understanding of medical informatics. This course is designed to increase the student’s knowledge of qualitative and quantitative research concepts and methodologies. Emphasis is on understanding and critiquing research reports appropriate for clinical practice improvement.

PAEP 7052  Patient Assessment for Physician Assistants I  Credit Hrs: 2
Patient Assessment is essential to every patient encounter and is the critically important skill required to be performed by every Physician Assistant. Patient Assessment for Physician Assistants introduces learners to the structure and sequence of a clinical interview and physical examination based on a patient centered approach. This course is taught in a combined lecture/demonstration/lab format in three stand-alone sections over 3 semesters. At the end of the final semester the learner will be required to demonstrate proficiency in a Standardized Patient encounter.

Curriculum Integration
Nil Credit
Clinical Integration is an introduction to critical thinking skills, medical documentation and case based learning that develops themes from the material being presented in the concurrent semester of the Master Physician Assistant Studies program. In small groups or as a whole, the class will investigate relevant issues of the case, factors related to patient care, and approaches to clinical medicine building on program material. Students will be guided through a discussion of the required history, review of systems, physical examination and the investigative studies that lead to the appropriate diagnosis, treatment and follow up that is required. As well as learning to be aware of the patient’s social / economic situation the resources the patient may require.

Winter Term Courses:

PHAC 7240  Fundamentals in Pharmacology for Health Care II  Credit Hrs: 6
This course will build on foundational knowledge of human physiology and examine basic pharmacokinetic (drug metabolism) and pharmacodynamic (drug action) principles of specific drug classes related to the central nervous system (depression, psychosis, anxiety, epilepsy, movement disorders (e.g., Parkinson's)), infection (bacterial, viral, fungal), cancer, asthma, allergy, osteoporosis, gastrointestinal system, reproduction and special topics (pregnancy, pediatrics, geriatrics, drugs of abuse). Remaining major drug classes will be covered in PHAC 7230. Course delivery will involve lectures followed by clinical case-based tutorials.
PAEP 7002  Physiology & Pathophysiology for Physician Assistants II  Credit Hrs: 3
The goal of Physiology and Pathophysiology 7002 is to provide the Physician Assistant-Learner additional insight into the foundations of Basic Medical Science building on material addressed in PAEP 7000.

PAEP 7050  Obstetrics & Gynecology for Physician Assistants  Credit Hrs: 3
Obstetrics and Gynecology for Physician Assistants provides a brief, comprehensive introduction to obstetrics and gynecology. This course is designed to impart an understanding of normal pregnancy and development and to allow the Physician Assistant, within his or her scope of practice, to diagnose and treat medical, surgical, infectious, and developmental conditions within the fields of obstetrics and gynecology. This is a blended course with 2 hours of online learning and 1 hour of face to face teaching per week.

PAEP 7054  Patient Assessment for Physician Assistants II  Credit Hrs: 2
Patient Assessment II for Physician Assistants continues the development of patient assessment skills from PAEP 7052. Physician Assistant will address the structure and sequence of a clinical interview and examination based on a patient centered approach. This course is taught in a combined lecture/demonstration/laboratory format.

PAEP 7068  Adult Medicine for Physician Assistants I  Credit Hrs: 6
Adult Medicine for Physician Assistants I provides a comprehensive overview of adult medicine for the Physician Assistant. It will focus on assessment, diagnosis and treatment of patients with acute and chronic medical illnesses. It is organized into system blocks: Hematology/Oncology, Gastroenterology, Hepatology, Endocrinology, Neurosciences, Dermatology, Nephrology, Musculoskeletal, Cardiovascular, Respiratory, Otolaryngology, and Ophthalmology. It is taught in a practical, case-based lecture format.

PAEP 7090  Principles of Psychiatry for Physician Assistants  Credit Hrs: 3
Psychiatry for Physician Assistants provides an introduction into the core course material utilized in the diagnosis and provision of care for patients who require mental health counseling, psychiatric health services, and referral to the appropriate services.

Curriculum Integration  Nil Credit
Clinical Integration is an introduction to critical thinking skills, medical documentation and case based learning that develops themes from the material being presented in the concurrent semester of the Physician Assistant Education Program. In small groups or as a whole, the class will investigate relevant issues of the case, factors related to patient care, and approaches to clinical medicine building on program material.

Early Exposure  Nil Credit
This session will provide physician assistant learners with an early exposure opportunity in a clinical setting. This will allow them to better understand the role of the physician assistant within their working environment.
PAEP 7046  Genetics for Physician Assistants  Credit Hrs: 1
Genetics for Physician Assistants provides an introduction to the world and nature of Medical Genetics, one of the most rapidly advancing fields of medicine. Genetics is now integral to all aspects of biomedical science and every physician assistant and physician who practices in the 21st century must have knowledge of the principles and their application to a wide variety of clinical problems. Medical genetics provides a unique perspective on function of the human body in health and disease; it is both a clinical specialty and a basic science. The format will follow a 15 to 20 minute lecture followed by Illustrative cases and problems. This course will be team taught by several Faculty of Medicine staff members and has a laboratory component.

PAEP 7048  Pediatrics for Physician Assistants  Credit Hrs: 3
A comprehensive overview of pediatric medicine for the Physician Assistant focusing on: 1) Acquisition of basic knowledge of growth and development (physical, physiologic and psychosocial) and of its clinical application from birth through adolescence; 2) Development of communication skills that will facilitate the clinical interaction with children, adolescents and their families and thus ensure that complete, accurate data are obtained by medical history and physical examination; 3) Acquisition of the knowledge necessary for the diagnosis and initial management of common acute and chronic illnesses found in childhood or the pediatric population; 4) Development of clinical problem-solving and clinical reasoning skills; 5) An understanding of the influence of family, community and society on the child in health and disease; 6) Development of strategies for health promotion as well as disease and injury prevention; and 7) Development of the attitudes and professional behavior appropriate for clinical practice.

PAEP 7056  Patient Assessment for Physician Assistants III  Credit Hrs: 2
This third part of Patient Assessment for Physician Assistants continues to refine the structure and sequence of a physical examinations and clinical interview. This course is taught in a combined lecture/demonstration/lab format.

PAEP 7078  Adult Medicine for Physician Assistants II  Credit Hrs: 6
Adult Medicine for Physician Assistants II provides a comprehensive overview of adult medicine by focusing on the assessment, diagnosis and treatment of patients with acute and chronic medical illnesses. It is organized into system blocks: Hematology/Oncology, Gastroenterology, Hepatology, Endocrinology, Neurosciences, Dermatology, Nephrology, Musculoskeletal, Cardiovascular, Respiratory, Otolaryngology, and Ophthalmology. It is delivered in a practical, case-based lecture format.

PAEP 7082  Diagnostic Imaging for Physician Assistants  Credit Hrs: 1
Diagnostic Imaging for Physician Assistants provides an overview of the principles of radiation safety and diagnostic imaging for the Physician Assistant. It will focus on the basic skills required selecting the appropriate imaging study, and in reading and interpreting diagnostic images. The course material is delivered online from the University of Virginia's well-respected Diagnostic Imaging tutorials with guided assignments highlighting appropriate material for the entry-to-practice level physician assistant. Lectures follow each assignment date and will focus on actually reading various diagnostic images. A final examination is a mixture of multiple choice questions and images.
PAEP 7084 Microbiology for Physician Assistants Credit Hrs: 1
Microbiology and Infectious Diseases for Physician Assistants provides an introductory course into the clinician’s approach to the effective and efficient diagnosis, treatment, and management of infectious disease.

PAEP 7100 Principles of Surgery for Physician Assistants Credit Hrs: 3
Principles of Surgery for Physician Assistants incorporates the principles and techniques of safe and effective surgical care of the whole person of any age. This course provides an overview of the requirements involved in the care of the surgical patient, including: pre-operative, operative, and post operative care; fluid and management; resuscitation; wound care and healing; and the initial approach to surgical related complications. This course will provide an academic or didactic approach to the subject matter in preparation for clinical rotations in conjunction with procedures taught through Curriculum Integration.

PAEP 7110 Emergency & Critical Care for Physician Assistants Credit Hrs: 3
The purpose of the Emergency and Critical Care Medicine course is to provide the PA student with the knowledge to assess and respond with the appropriate action to a life or potentially medically threatening event. These events may occur in any environment and the knowledge is applicable to all patient care.

PAEP 7150 Year 1 Comprehensive Exam Pass/Fail
A pass/fail multiple choice examination designed to assess students’ knowledge of clinically relevant Year 1 material prior to entry into their clinical year.

Curriculum Integration Nil Credit
Clinical Integration is an introduction to critical thinking skills and problem based learning that develops themes from the material being presented in the concurrent semester of the Master of Physician Assistant Studies Program. In small groups or as a whole, the class will investigate a patient complaint from initial presentation through the various steps required to formulate a treatment plan. From taking the appropriate required history, review of systems, physical examination, to which investigative studies are needed, to building a differential diagnosis, the students are mentored by a subject matter expert. The diagnosis, treatment and appropriate follow up that is required is also explored in the class.

Early Exposure Nil Credit
This session will provide physician assistant learners with an opportunity to practice history taking, physical examination, and documentation skills in a clinical setting. This will allow them the opportunity to act as health care providers in a closely supervised setting, preparing them for the clinical year as physician assistant students.
**Procedural Lab**

Based on requirements of the National Competencies Profile for Physician Assistants, the Laboratory portion of Principles of Surgery and the Emergency and Critical Care courses for Physician Assistants incorporates the principles and techniques of safe and effective procedures that are commonly required of PAs. The sessions will include: vascular access, resuscitation; air way management, wound care and healing; and the diagnostic related procedures.