

## PARAMEDIC

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### Program Outline

<b>Major:</b>	PARA
<b>Length:</b>	2 Years
<b>Delivery:</b>	4 Semesters
<b>Credential:</b>	Ontario College Diploma
<b>Effective:</b>	2015-2016
<b>Location:</b>	Barrie
<b>Start:</b>	Fall (Barrie)

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#### Description

Students are prepared with the knowledge and skills to practice emergency out-of-hospital medical/trauma care and to function as an integral member of the health care team in assisting victims of injury or illness. Graduates of the program will have demonstrated the ability to safely and competently care for a diverse population in emergency and non-emergency situations. They will also be expected to administer medical interventions, including controlled medical acts, and provide compassionate care. The program is comprised of classroom, laboratory, hospital clinical and field placement experience.

#### Career Opportunities

Graduates of the program are eligible to write the Ontario Advanced Emergency Medical Care Assistant Examination (A.E.M.C.A.). If successful, graduates are eligible to seek employment with paramedic services and other agencies throughout Canada. Opportunities for graduates may also be found in the field of health and safety, event medical services and the military. Please note that employment in Ontario as a paramedic requires a current class 'F' license and it is the graduate's responsibility to acquire this license prior to seeking employment.

#### Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

- utilize the process and criteria provided for primary and secondary patient assessment to determine manifestations and priorities of treatment;
- evaluate priorities of assessment and effectiveness of interventions selected in response to changes in assessment findings and or conditions;
- practice effective and safe care by following established policies and procedures, current legislation, regulations and standards;
- integrate and perform controlled medical acts;
- communicate with patients, utilizing therapeutic approaches;
- communicate and work collaboratively as a member of an interprofessional team;
- provide safe operation and necessary readiness checks of emergency vehicles and equipment;
- maintain the level of physical fitness required by the profession;
- employ environmentally sustainable practices within the profession;
- apply basic social entrepreneurial strategies to identify and respond to new opportunities.

### **External Recognition:**

The Paramedic Program is accredited by the Canadian Medical Association.

### **The Program Progression:**

Fall Intake - Barrie

Sem 1	Sem 2	Sem 3	Sem 4
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Fall	Winter	Fall	Winter
2015	2016	2016	2017

### **Articulation:**

A number of articulation agreements have been negotiated with universities and other institutions across Canada, North America and internationally. These agreements are assessed, revised and updated on a regular basis. Please contact the program co-ordinator for specific details if you are interested in pursuing such an option. Additional information can be found on our website at

<http://www.georgiancollege.ca/admissions/credit-transfer/>

### **Admission Requirements:**

OSSD or equivalent with

- Grade 12 English (C or U)
- Grade 12 Mathematics (C or U)

- Grade 11 or 12 Biology (C or U)
- Grade 11 or 12 Chemistry (C or U)

Also recommended:

- a minimum G2 driver license (applicants with demerit points may not be eligible for employment)

Mature students, non-secondary school applicants (19 years or older), and home school applicants may also be considered for admission. Eligibility may be met by applicants who have taken equivalent courses, upgrading, completed their GED, and equivalency testing. For complete details refer to: [www.georgiancollege.ca/admissions/policies-procedures/](http://www.georgiancollege.ca/admissions/policies-procedures/)

Applicants who have taken courses from a recognized and accredited post-secondary institution and/or have relevant life/learning experience may also be considered for admission; refer to the Credit Transfer Centre website for details: [www.georgiancollege.ca/admissions/credit-transfer/](http://www.georgiancollege.ca/admissions/credit-transfer/)

### **Selection Process:**

All applicants must write an admission test (HOAE). Selection is based on admission requirements, academic grades and testing results.

### **Additional Information:**

Before enrolling in this program, applicants should be aware that under the provisions of the Ambulance Act, employment as a paramedic is prohibited to any individual who, in the past year has:

- Received six or more demerit points on his/ her driving record
- Had his/ her driver's license suspended in the previous two years
- Been prohibited from driving under the Criminal Code of Canada within the past three years
- OR has been convicted of any crime involving moral turpitude for which she/ he has not been pardoned.

These regulations can be found under the Ambulance Act of Ontario.

Completion of college immunization record.

Applicants must have up-to-date immunization records (Clinical Preparedness Permit) in compliance with the Public Hospitals Act and the Ontario Ambulance Act. Completion

and submission of this record is required prior to your first placement in order to ensure your placement in hospital clinical and field placements.

In order to provide quality practicum placements, students will be placed in a variety of agencies and services . While every effort is made to arrange placements in the planned sequence, placements are dependent upon availability and may need to be completed at a later date. Students are required to provide their own transportation.

Students must also have completed a current Health Care Provider Level CPR (HCP) and Standard First Aid (includes theory and practice in artificial respiration, one and two person CPR, infant and child CPR, bag-valve-mask ventilation and defibrillation with an automated external defibrillator (AED) and provide proof of certification. Online courses are NOT acceptable. All certifications must be renewed annually. Students must also complete a mask fit test during the first semester of classes and this is also to be renewed every year.

**\*\* CRIMINAL REFERENCE CHECK \*\***

Placement agencies require an up-to-date clear criminal reference check and vulnerable sector check prior to going out on placement. Students should obtain their criminal reference three months prior to placement; checks conducted earlier may not be considered current. As some jurisdictions require longer lead-time for processing, please check with the program coordinator to ensure you allow for sufficient turn-around time. It is the students responsibility to provide the completed document prior to placement start.

NOTE: Individuals who have been charged or convicted criminally and not pardoned will be prohibited from proceeding to a clinical or work placement.

**Graduation Requirements:**

- 23 Mandatory Courses
- 2 Communications Courses
- 3 General Education Courses
- 2 Field Placements

**Graduation Eligibility:**

To graduate from this program, the passing weighted average for promotion through each semester, from year to year, and to graduate is 60%. Additionally, a student must attain a minimum of 50% or a letter grade of P (Pass) or S (Satisfactory) in each course in each semester unless otherwise stated on the course outline.

**Mandatory Courses**

BIOL1023 Anatomy and Physiology - Introduction

BIOL1024 Human Pathophysiology - Introduction  
 BIOL1025 Anatomy and Physiology - Advanced  
 BIOL1026 Human Pathophysiology - Advanced  
 PARA1002 Paramedic Fitness Training  
 PARA1003 Patient Care Theory 1  
 PARA1005 Medico Legal Aspects  
 PARA1008 Patient Care Theory 2  
 PARA1009 Patient Care Procedures - Intermediate  
 PARA1011 Hospital Clinical 1  
 PARA1012 Communication for Paramedic  
 PARA1013 Patient Care Procedures - Introduction  
 PARA1014 Crisis Intervention for Paramedic  
 PARA1015 Ambulance Operations - Theory  
 PARA1016 Ambulance Operations - Lab  
 PARA2000 Patient Care Theory 3  
 PARA2002 Advanced Skills Theory  
 PARA2005 Hospital Clinical 2  
 PARA2008 Paramedic Review  
 PARA2010 Pharmacology  
 PARA2011 Patient Care Procedures - Advanced  
 PARA2012 Leadership and Professionalism  
 PARA2013 Advanced Skills Lab

#### Communications Courses

To be selected at time of registration from the College list, as determined by testing.

#### General Education Courses

To be selected from College list

#### Field Placements

PARA2006 Ambulance Field Experience  
 PARA2009 Ambulance Field Consolidation

#### Course Descriptions:

BIOL1023 Anatomy and Physiology - Introduction 28.0 Hours

Normal human anatomy and physiology is studied. Emphasis is placed on anatomical orientation to the body, cellular processes, inflammation as well as the cardiovascular, respiratory, nervous, muscular and skeletal systems.

C- BIOL1024 Human Pathophysiology - Introduction and C- PARA1003 Patient Care Theory 1 and C- PARA1013 Patient Care Procedures - Introduction

**BIOL1024 Human Pathophysiology - Introduction 28.0 Hours**

Students build on content studied from anatomy and physiology with emphasis on related pathophysiological conditions that may be encountered in the field. Content will focus on homeostasis and disease, cellular adaptation, microbiology, inflammation, infection and immunological disorders, cardiovascular disorders and disease, respiratory disorders and disease, acute and chronic neurological disorders and musculoskeletal disorders.

C- BIOL1023 Anatomy and Physiology - Introduction and C- PARA1003 Patient Care Theory 1 and C- PARA1013 Patient Care Procedures - Introduction

**BIOL1025 Anatomy and Physiology - Advanced 28.0 Hours**

As a continuation of Human Anatomy and Physiology – Introduction, students focus on the structure and function of organ systems. The organ systems presented include integumentary, endocrine, renal, digestive, reproductive, fluid, electrolyte and pH balance, labour and delivery, and neonatal physiology.

P- BIOL1023 Anatomy and Physiology - Introduction and P- BIOL1024 Human Pathophysiology - Introduction and C- BIOL1026 Human Pathophysiology - Advanced and C- PARA1008 Patient Care Theory 2 and C- PARA1009 Patient Care Procedures - Intermediate

**BIOL1026 Human Pathophysiology - Advanced 28.0 Hours**

Students expand on content studied from Anatomy and Physiology Introduction and Human Pathophysiology Introduction with emphasis on related pathophysiological conditions that may be encountered in the field. Emphasis is placed on reproductive/genitourinary disorders, obstetrical emergencies, neonatology and pediatric disorders, disorders of the eyes and ear, renal disorders, fluid electrolyte and acid base imbalances, oncology and neoplasms, endocrine disorders, integumentary disorders and gastrointestinal disorders.

P- BIOL1023 Anatomy and Physiology - Introduction and P- BIOL1024 Human Pathophysiology - Introduction and C- BIOL1025 Anatomy and Physiology - Advanced and C- PARA1008 Patient Care Theory 2 and C- PARA1009 Patient Care Procedures - Intermediate

**PARA1002 Paramedic Fitness Training 42.0 Hours**

General and job-specific fitness activities are studied and practiced, enabling students to perform the physical requirements of a Paramedic. Emphasis is placed on a strength component focusing on safe lifting practices. Students receive initial instruction on how to assess, monitor and improve their fitness level through designing and implementing a personal training program which includes both a fitness program and a nutritional awareness analysis. As part of an introduction to a lifelong healthy lifestyle, students participate in scheduled group fitness training sessions.

**PARA1003 Patient Care Theory 1 56.0 Hours**

Students are provided with the knowledge, skill and value base for critical thinking in the assessment and interpretation of a presenting medical / trauma situation. The focus is on the ability to make sound judgments with implications for patient management based on assessment findings and priority of treatment. Monitoring the patient's status is stressed in order to adapt to changes in the treatment and therapeutic approaches pertinent to the out of hospital field including transport of a patient.

C- BIOL1023 Anatomy and Physiology - Introduction and C- BIOL1024 Human Pathophysiology - Introduction and C- PARA1012 Communication for Paramedic and C- PARA1013 Patient Care Procedures - Introduction

#### PARA1005 Medico Legal Aspects 28.0 Hours

Students learn to apply relevant legislation and regulations enacted by the Provincial and Federal Governments. Focus is on the accountability and responsibility of their behaviours by concentrating upon the legalities and ethical principles governing their professional duties. Students will understand their roles as advocates of patient rights to dignity, privacy, confidentiality and consent / non-consent to treatment.

#### PARA1008 Patient Care Theory 2 56.0 Hours

Students build on the knowledge, skill and value base of Patient Care Theory I with emphasis on critical thinking related to assessment and interpretation of assessment findings and their implications for patient management. Additional focus is placed on the adaptation of the body to trauma and disease through compensatory mechanisms. Related patient assessments and management concentrate on continuous monitoring of patient management, adapting to changes and determining the potential for life threat.

(P- BIOL1023 Anatomy and Physiology - Introduction or P- PARA1000 Anatomy and Physiology 1) and (P- BIOL1024 Human Pathophysiology - Introduction or P- PARA1000 Anatomy and Physiology 1) and P- PARA1003 Patient Care Theory 1 and P- PARA1013 Patient Care Procedures - Introduction and (C- BIOL1025 Anatomy and Physiology - Advanced or C- PARA1006 Anatomy and Physiology - Advanced) and (C- BIOL1026 Human Pathophysiology - Advanced or C- PARA1006 Anatomy and Physiology - Advanced) and C- PARA1009 Patient Care Procedures - Intermediate

#### PARA1009 Patient Care Procedures - Intermediate 56.0 Hours

Students acquire the skills necessary to perform specific assessment and pre-hospital care interventions to victims of trauma or illness. They also learn how to recognize clinical complications and minimize them, either at the scene or during transport by ambulance. Students apply selected laboratory skills for the provision of specific out of hospital emergency care in various simulated laboratory settings. They apply biomechanical principles to demonstrate their ability to lift, transfer, position, and transport patients in the out of hospital setting (patients weighing 96 kg).

(P- BIOL1023 Anatomy and Physiology - Introduction or P- PARA1000 Anatomy and Physiology 1) and (P- BIOL1024 Human Pathophysiology - Introduction or P- PARA1000 Anatomy and Physiology 1) and P- PARA1003 Patient Care Theory 1 and P- PARA1013

Patient Care Procedures - Introduction and (C- BIOL1025 Anatomy and Physiology - Advanced or C- PARA1006 Anatomy and Physiology - Advanced) and (C- BIOL1026 Human Pathophysiology - Advanced or C- PARA1006 Anatomy and Physiology - Advanced) and C- PARA1008 Patient Care Theory 2

**PARA1011 Hospital Clinical 1 84.0 Hours**

Practical experience is provided in a number of hospital settings. Students apply theoretical and practical content of previous courses through observation and participation in a variety of selected hospital departments. Students gain an understanding of the role of hospital staff in the continuing care of pre-hospital patients.

P- PARA1003 Patient Care Theory 1 and P- PARA1013 Patient Care Procedures - Introduction and C- PARA1008 Patient Care Theory 2 and C- PARA1009 Patient Care Procedures - Intermediate

**PARA1012 Communication for Paramedic 28.0 Hours**

Students study the skills to communicate effectively as an interprofessional team in various settings using a variety of methods. Students learn the basics of medical terminology and explore the theory and practice of effective listening and communication skills. Students are also introduced to documentation techniques using field-specific forms.

**PARA1013 Patient Care Procedures - Introduction 56.0 Hours**

Students acquire the skills necessary to perform basic assessment and out of hospital care interventions to victims of trauma or the critically ill. Student apply selected care laboratory skills for the provision of basic out of hospital emergency care in various simulated laboratory settings. Upon course completion, students demonstrate their ability to lift, transfer, position and transport patients in the out of hospital setting (patients weighing up to 87 kg).

C- BIOL1023 Anatomy and Physiology - Introduction and C- BIOL1024 Human Pathophysiology - Introduction and C- PARA1003 Patient Care Theory 1

**PARA1014 Crisis Intervention for Paramedic 28.0 Hours**

Students develop an understanding of interactions between patients, family members and caregivers in a variety of situations. Students learn how to recognize, assess and intervene in situations involving stress, abuse, mental and physical disabilities, and death and discuss the impact of these situations for the patient, family and caregiver while being sensitive to diverse populations. In addition, students learn strategies for ensuring their own personal safety and that of the patient, family members and bystanders, as well as techniques to cope with stressful situations that may be encountered as paramedics.

**PARA1015 Ambulance Operations - Theory 14.0 Hours**



Students learn to prepare, maintain and safely utilize an emergency vehicle. Principles of defensive driving are discussed. Students learn the role that operational policies and procedures play in the provision of ambulance services.

C- PARA1016 Ambulance Operations - Lab

PARA1016 Ambulance Operations - Lab 28.0 Hours

Students perform driving skills in a simulated setting. Student also gain knowledge of and utilize safety-related equipment and procedures and learn to work safely with alternate modes of patient transportation. In addition, students develop the skills necessary for performing radio communications and licensure to utilize the communication equipment.

C- PARA1015 Ambulance Operations - Theory

PARA2000 Patient Care Theory 3 56.0 Hours

Students utilize their growing knowledge, skills and values as a basis for critical thinking in the assessment and interpretation of various medical and trauma situations. Students focus on the ability to exercise sound judgment pertaining to implications of patient management based on assessment findings and priority of treatment through the use of problem based learning. The continuous monitoring of the status of the patient is emphasized as a means to provide the optimum therapeutic approach for pre- hospital care.

(P- BIOL1025 Anatomy and Physiology - Advanced or P- PARA1006 Anatomy and Physiology - Advanced) and (P- BIOL1026 Human Pathophysiology - Advanced or P- PARA1006 Anatomy and Physiology - Advanced) and P- PARA1008 Patient Care Theory 2 and P- PARA1009 Patient Care Procedures - Intermediate and C- PARA2011 Patient Care Procedures - Advanced

PARA2002 Advanced Skills Theory 42.0 Hours

Theoretical preparation required to perform advanced paramedic skills including electrical therapy, symptom relief and initiation of intravenous (IV) lines is emphasized. Focus is placed on the potential risks, benefits and limitations of these skills as they relate to assessment findings and subsequent treatment plan. The interaction between primary care (PCP) and advanced care paramedics (ACP) is also explored in the context of PCP and ACP scopes of practice.

(P- BIOL1025 Anatomy and Physiology - Advanced or P- PARA1006 Anatomy and Physiology - Advanced) and (P- BIOL1026 Human Pathophysiology - Advanced or P- PARA1006 Anatomy and Physiology - Advanced) and P- PARA1008 Patient Care Theory 2 and P- PARA1009 Patient Care Procedures - Intermediate

PARA2005 Hospital Clinical 2 42.0 Hours

Practical experience will be provided in a number of acute care and emergent hospital settings. Students will apply theoretical and practical content of previous courses through observation and participation in a variety of selected hospital departments.

Students will gain an understanding of the role of hospital staff in the continuing care of pre-hospital patients.

P- PARA1008 Patient Care Theory 2 and P- PARA1009 Patient Care Procedures - Intermediate and P- PARA1011 Hospital Clinical 1

#### PARA2006 Ambulance Field Experience 84.0 Hours

Students have the opportunity to gain first-hand practical experience in the community as a part of an emergency health services team. Under the direct supervision of a paramedic team, students apply theoretical and practical content of previous courses through observation and participation in emergency medical and trauma situations. Students gain an understanding of the role of emergency medical services in the care of out of hospital patients.

(P- BIOL1025 Anatomy and Physiology - Advanced or P- PARA1006 Anatomy and Physiology - Advanced) and (P- BIOL1026 Human Pathophysiology - Advanced or P- PARA1006 Anatomy and Physiology - Advanced) and P- PARA1008 Patient Care Theory 2 and P- PARA1009 Patient Care Procedures - Intermediate and P- PARA1011 Hospital Clinical 1

#### PARA2008 Paramedic Review 28.0 Hours

Students participate in a final consolidation of theory and practice as a means of preparing themselves to write certification exams and to successfully transition from the role of student to practitioner. Students have the opportunity to identify their strengths and weaknesses through the use of several evaluative methods.

P- PARA2000 Patient Care Theory 3 and P- PARA2002 Advanced Skills Theory and P- PARA2005 Hospital Clinical 2 and P- PARA2011 Patient Care Procedures - Advanced and C- PARA2009 Ambulance Field Consolidation and C- PARA2013 Advanced Skills Lab

#### PARA2009 Ambulance Field Consolidation 350.0 Hours

Students are provided with an opportunity to consolidate skills and knowledge developed during the program as a member of an emergency health services team. Under the direct supervision of a paramedic preceptor, students apply theoretical and practical knowledge and skills from previous courses through participation in emergency medical and trauma situations. The experiential learning obtained from this placement forms the basis for professional practice in the future

P- PARA2000 Patient Care Theory 3 and P- PARA2002 Advanced Skills Theory and P- PARA2005 Hospital Clinical 2 and P- PARA2011 Patient Care Procedures - Advanced and C- PARA2008 Paramedic Review and C- PARA2013 Advanced Skills Lab

#### PARA2010 Pharmacology 28.0 Hours

Students gain an introductory knowledge of the principles of pharmacology including pharmacokinetics, pharmacodynamics, routes of administration, patient rights and administration of drugs. Students study drugs commonly encountered during paramedic practice with particular emphasis on drugs administered within the scope of practice of Primary Care Paramedic (PCP) as per the National Occupational Competency Profiles

drug list and the American Heart Association guidelines. Students learn to accurately perform medical math, make critical decisions and evaluate pharmacological interventions in the context of clinical presentations.

(P- BIOL1025 Anatomy and Physiology - Advanced or P- PARA1006 Anatomy and Physiology - Advanced) and (P- BIOL1026 Human Pathophysiology - Advanced or P- PARA1006 Anatomy and Physiology - Advanced) and P- PARA1008 Patient Care Theory 2

#### PARA2011 Patient Care Procedures - Advanced 56.0 Hours

Students acquire the skills necessary to perform specific assessment and out of hospital care interventions to victims of trauma or to the critically ill. Students also learn how to recognize complications and minimize them, either at the scene or during transport by ambulance. Students apply selected laboratory skills for the provision of specific pre-hospital emergency care in various simulated laboratory settings.

(P- BIOL1025 Anatomy and Physiology - Advanced or P- PARA1006 Anatomy and Physiology - Advanced) and (P- BIOL1026 Human Pathophysiology - Advanced or P- PARA1006 Anatomy and Physiology - Advanced) and P- PARA1008 Patient Care Theory 2 and P- PARA1009 Patient Care Procedures - Intermediate and C- PARA2000 Patient Care Theory 3

#### PARA2012 Leadership and Professionalism 28.0 Hours

Critical thinking skills are developed by researching and discussing issues relevant to the practice of out of hospital care. Students are encouraged to develop and use information literacy strategies to locate, select and evaluate information as a means to support decisions and assist in life-long learning in the professional role of paramedic. Through examination of issues related to paramedicine, students appreciate their responsibilities as future leaders in out of hospital care and further define and formalize their role in health care as a whole.

P- PARA1008 Patient Care Theory 2

#### PARA2013 Advanced Skills Lab 42.0 Hours

Emphasis is placed on the appropriate preparation required to perform advanced paramedic skills including electrical therapy, symptom relief and initiation of intravenous (IV) lines. Focus is placed on the performance of practical skills related to advanced medical acts in laboratory and simulated environments.

P- PARA2000 Patient Care Theory 3 and P- PARA2002 Advanced Skills Theory and P- PARA2011 Patient Care Procedures - Advanced

### **Course Description Legend**

P = Prerequisite; C = Concurrent prerequisite; CO= Corequisite

*Information contained in College documents respecting programs is correct at the time of publication. Academic content of programs and courses is revised on an ongoing*

*basis to ensure relevance to changing educational objectives and employment market needs. The college reserves the right to add or delete programs, options, courses, timetables or campus locations subject to sufficient enrolment, and the availability of courses.*