

PRE-HEALTH SCIENCES

Program Outline

Major: PRHS Length: 1 Year

Delivery: 2 Semesters

Credential: Ontario College Certificate

Effective: 2014-2015

Location: Barrie, Midland, Muskoka, Orangeville, Owen Sound, South Georgian Bay **Start:** Fall (Barrie, Muskoka, Orangeville, Owen Sound, South Georgian Bay),

Winter (Barrie, Owen Sound), Summer (Midland)

Description

The one year certificate program is designed to assist students in determining which health science program will best suit their needs. It provides students with the opportunity to examine the expectations of the various health science disciplines and to assess their suitability and compatibility in relation to these expectations. Recent high school graduates or mature students wishing to return to post secondary education may wish to access this program to enrich their knowledge of health science related courses and also obtain necessary pre-requisites for health science related programs. The program includes courses ranging from physical and social sciences to communication and critical thinking.

Career Opportunities

Upon successful completion of the program, the student will be able to apply for admission to the first year of a health science program, whether at Georgian College or other colleges. Every effort is made to assist students to select courses which will provide them with optimum transfer credits to other college and university programs. Successful completion of the program does not guarantee entry into any health science program.

Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

- apply basic knowledge from the life sciences to health-related topics;
- demonstrate a basic knowledge of the scope, present conditions and future trends in Canadian health care;
- use a variety of computer hardware and software and other technological tools appropriate and necessary to performance of tasks;
- apply a wide variety of mathematical concepts and techniques to situations relevant to the health science field;
- communicate clearly, concisely and correctly in the written, spoken and visual form to meet the needs of the audience and the objective of the communication;
- evaluate thinking and reasoning as well as problem solving and decision making;
- interact with others in groups and teams in ways that contribute to effective working relationships and to the achievement of goals;
- manage the use of time and other resources to attain personal and/or projectrelated goals;
- demonstrate a basic knowledge regarding health care;
- apply the benefits of General Education to participate in society as an informed citizen and pursue an enriched personal and professional life.

The Program Progression:

Admission Requirements:

You must meet ONE of the following requirements to be eligible for admission to these programs:

Secondary school applicants:

- OSS curriculum: OSSD or equivalent, with Grade 12 English (C) or (U) (ENG4C, ENG4U)

Non-Secondary school applicants (19 years or older):

- Any credit Communication course taken at Georgian College
- Equivalent courses in English taken through secondary school or Independent Learning Centres (at the general, advanced, college or university level)
- Academic and Career Entrance Certificate (ACE) program with communications
- Mature student testing in English that meets the minimum standards for admission (available through most testing services)*
- Ontario High School Equivalency Certificate (GED)
- English, Literature or Communication credit courses from accredited colleges/universities

Home school applicants:

- Applicants can write the mature student testing in English that meets the minimum standards for admission (available through testing services)*
- * available from Georgian College. For a complete listing please contact the Office of the Registrar.

Non-secondary school applicants who are 19 years of age or over by the first day of classes, and who lack the academic entrance qualifications, may be considered for entrance to an appropriate post-secondary diploma or certificate program as mature applicants. Mature applicants must meet all program specific prerequisites including all selection criteria; equivalencies are stated above. Applicants who are unsure whether they meet admission requirements should contact the Office of the Registrar. In addition, those applying as mature students and having no documentation of Grade 12 education must supply, if required, proof of age, such as a copy of an official birth certificate or driver's licence. Refer to Section 2.5 and 2.6 of the Academic Calendar for further details.

Credit transfer and course exemptions:

Applicants who have taken courses from a recognized and accredited post-secondary institution and/or have relevant life/learning experience may be eligible for credit transfer/course exemptions. Courses/experience must match at least 80% of the learning outcomes of a Georgian College course with a minimum grade of 60% or C achieved in previous coursework; some program exceptions apply (see program outline). For further information please visit the Credit Transfer Centre website: georgiancollege.ca/admissions/credit-transfer/

Graduation Requirements:

- 9 Mandatory Courses
- 1 Communications Course
- 2 General Education Courses

Graduation Eligibility:

To graduate from this program, the passing weighted average for promotion through each semester, 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

BIOL1009 Biological Principles - Introduction

BIOL1010 Applied Biological Principles

CHEM1000 Chemistry 1 CHEM1001 Chemistry 2

HLTH1000 Health Care in Canada

HLTH1002 Success Strategies for Pre-Health Sciences and Beyond

HUMN1000 Critical Thinking

MATH1005 Math for Life Sciences PHYS1000 Physics: A Conceptual View

Communications Course

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

General Education Courses
To be selected from College list

Course Descriptions:

BIOL1009 Biological Principles - Introduction 56.0 Hours

This course is the study of cellular structure and function beginning with orientation to cells and continuing through the tissues. An introduction to microbiology is included. Building a foundation of essential knowledge will support further courses dealing with specific topics in anatomy and physiology of the body.

BIOL1010 Applied Biological Principles 56.0 Hours

This course is the study of organ systems and organismic functions of the body. The following major organ systems will be examined: the musculoskeletal system, the cardiovascular system, the respiratory system, the nervous system, the endocrine system, the urinary system and the reproductive system. Three unifying themes, the interrelationships of body organ systems, homeostasis, and the complementarity of structure and function, will provide the basis of understanding for the workings of the body.

P- BIOL1009 Biological Principles - Introduction or P- BIOL1000 Biological Principles - Introductory Concepts

CHEM1000 Chemistry 1 42.0 Hours

This course is intended as an introduction to the fundamentals of chemistry for students who have never taken a chemistry course or those who have had a significant interruption in their studies. It will cover topics such as atomic structure, formulae and nomenclature through classroom lecture enhanced by the performance of laboratory experiments.

CHEM1001 Chemistry 2 42.0 Hours

This course is intended as a continuation of the course Chemistry 1. It will cover aspects of analytical chemistry including equilibrium and pH through classroom lecture enhanced by the performance of laboratory experiments.

P- CHEM1000 Chemistry 1 or P- CHE6105 Chemistry 1

HLTH1000 Health Care in Canada 42.0 Hours

This course will increase your students understanding of the principles of the Canada Health Act and the social, technological and economical factors that influence health care. You will develop a global view through exploring our national health care system. You will develop an awareness of what it means to be a health care worker as you explore the influence of professional values and ethics on health care decisions. Trends that are currently affecting health care delivery will be discussed.

HLTH1002 Success Strategies for Pre-Health Sciences and Beyond 42.0 Hours This course focuses on building skills that students need to be successful in Pre-Health and College. These skills include building self knowledge, good relationships/connections, and making positive changes that promote academic and personal success. Students utilize learning materials and actively participate in activities that identify core strengths and areas that require further development.

HUMN1000 Critical Thinking 42.0 Hours

Students learn to assess information, reason and solve problems with concepts related to logic and argumentation. As well, students develop the means to analyze and evaluate their own thinking and how it is affected by the world around them.

MATH1005 Math for Life Sciences 42.0 Hours

The goal of this course is to increase the students' awareness of the role that mathematics plays in today's society. The student will explore mathematical ideas through applications taken from the real world. These ideas will include logic, problem solving, statistics, and modelling (both algebraic and geometric). Students will be expected to apply mathematical knowledge and work cooperatively to solve problems.

PHYS1000 Physics: A Conceptual View 42.0 Hours

This course is intended as a conceptual course in introductory physics for students majoring in fields other than mathematics, pure science or engineering. It will provide students with a clear and logical presentation of some of the basic concepts and principles of physics, as they apply to the world view. This course could be one of the most challenging experiences you will ever have and if you work at it and let it happen, this experience will change your world view forever.

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.