

Preparing for Health Sciences Programs



Halifax • Canada

Many students undertake Bachelor of Science degrees at Saint Mary's in order to effectively prepare themselves for further education leading to careers in medicine, pharmacy, dentistry, nursing, midwifery, veterinary medicine, occupational therapy, physiotherapy, genetic counselling, or other health science fields.

Small class and lab sizes at Saint Mary's allow students to work closely with faculty, helping to develop excellent theoretical and laboratory skills, and—importantly—gain valuable research experiences.

If you're interested in pursuing a career in the health sciences, [book an appointment](#) with one of our Science Advisors. They can help ensure that you'll meet the admission requirements for your next academic goal while also completing your Bachelor of Science degree in a timely manner. Common requirements for health science programs can include courses in biology, chemistry, genetics, cell biology, organic chemistry, biochemistry, physiology, anatomy, microbiology, calculus, statistics, and physics.

Graduate and professional health sciences programs have specific prerequisites and admissions tests such as the Medical College Admission Test (MCAT), Dental Admissions Test (DAT), and General Graduate Record Examination (GRE). Be sure to research the admission requirements for your program and school of interest early in your undergraduate degree.

Small class and lab sizes allow students to work closely with faculty.

Science courses at Saint Mary's provide students with an excellent foundation for careers in the health sciences. Students will learn how to:

- Collect, analyze, and interpret scientific data through a wide range of hands-on laboratory experiences
- Search and critically interpret scientific literature
- Deliver effective oral, written, and visual scientific communication
- Work collaboratively

Did You Know...

SMU Students can take a certificate in **Forensic Sciences** or **Health, Wellness and Sport in Society** along with their undergraduate degree programs.



Questions?

Your Science Advisors can help you choose your courses, declare a major, and plan for your career. Book now: smu.ca/ScienceAdvising

Group One

Common Requirements for admission to Health Sciences Programs such as Accelerated Nursing, Pharmacy, Dentistry, Physiotherapy, Veterinary Science, or Occupational Therapy, or which may be helpful when preparing for standardized tests (e.g. MCAT, DAT, GRE). The specific courses required vary by program and university, so be sure to check the specific requirements for your programs of interest.

Biology

Molecular and Cell Biology.....	Biol 1211
Organismal and Ecological Biology.....	Biol 1212
Applications in Biology.....	Biol 1213
Genetics	Biol 2307
Cell Biology.....	Biol 2321
Principles of Physiology	Biol 3004
Comparative Vertebrate Anatomy	Biol 3020
Integrative Vertebrate Physiology	Biol 3021
Biostatistics	Biol 3308
Microbiology.....	Biol 3398

Chemistry

General Chemistry I	Chem 1210
General Chemistry II	Chem 1211 or 1212
Organic Chemistry I & II	Chem 2344 & 2354
Introduction to Biochemistry	Chem 3451

Physics

University Physics I & II.....	Phys 1210 & 1211
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Math

Introductory Calculus I	Math 1210
Introductory Calculus II	Math 1211
Intro to Mathematical Statistics.....	Math 1216

Group Two

Faculty of Science courses that are not required for admission to most health sciences programs, but which may be of interest and help you prepare for your chosen career.

Biology

Forensic DNA typing	Biol 3007/Frsc 3007
Plant Biology.....	Biol 3303
Molecular Biology	Biol 3419
Evolution.....	Biol 3423
Bioinformatics and Genomics.....	Biol 4007
Biology of Cancer.....	Biol 4010
Osteology	Biol 4100
Animal Athletic Performance	Biol 4407
Animal Developmental Biology.....	Biol 4408
Medical and Veterinary Entomology	Biol 4432

Chemistry

Biochemistry: Intermed. Metabolism ..	Chem 4452
Biochemistry: Secondary Metabolism	Chem 4453

Environmental Science

The Environment & Human Health	Envs 3440
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Forensic Sciences (Certificate)

Forensic Human Anatomy	Frsc 3400
<i>*Students must be accepted into the Certificate in Forensic Sciences Program to take this course</i>	

Geology

Environment, Radiation and Society.....	Geol 1207
Environmental Geology: Atlantic Canada Perspective.....	Geol 1208

Psychology

Introduction to Psychology	Psyc 1000
Introduction to Biological Psychology...	Psyc 1100
Intro to Developmental Psychology	Psyc 1400
Sensation and Perception	Psyc 2110
Child Development.....	Psyc 2410
Adolescent Development	Psyc 2420
Longevity and Aging.....	Psyc 2430
Cognitive Neuroscience	Psyc 3110
Drugs and Behaviour	Psyc 3130
Health Psychology	Psyc 3140
Occupational Health Psychology	Psyc 3210
Intro to Cognitive Neuroscience.....	Psyc 3310
Behavioral Analysis and Change.....	Psyc 3321
Typical & Atypical Development	Psyc 3410
Psychopathology: Specific Disorders..	Psyc 3610
Forensic Psychology	Psyc 3720
Psychophysics and Perception	Psyc 4110
Advanced Cognitive Neuroscience	Psyc 4120
Prevention & Treatment of Addictions	Psyc 4130
Human Neuropsychology	Psyc 4140
Counselling and Psychotherapy 1	Psyc 4610
Applied Sport Psychology.....	Psyc 4670

Group Three

Interdisciplinary courses which may be of interest and help you prepare for your chosen career.

Anthropology

Intro to Forensic Anthropology.....	Anth 2282
Human Evolution and Adaptation.....	Anth 2100
Sex, Gender & Society.....	Anth 3303
Forensic Skeletal Identification.....	Anth 3471
Forensic Skeletal Analyses.....	Anth 3472
Forensic Facial Anatomy	Anth 3473
Human Variation	Anth 3474
Paleopathology	Anth 3475

Atlantic Canada Studies

Health & Social Policy in Atl. Canada ..	Acst 2400
Health, Illness & Disease in Atl. Can. ..	Acst 4400

Criminology

Introduction to Criminology	Crim 1303
Criminological Theory	Crim 3011
Practicum in Social Development.....	Crim 3610
Criminalization of Mental Illness.....	Crim 4429

English

Cultural Studies	Engl 3343
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Economics

Health Economics	Econ 3366
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Geography

People, Place and Environment.....	Geog 1200
Biogeography	Geog 2333
Community & Regional Dev.....	Geog 4431

Health, Wellness and Sport in Society (Certificate)

Health, Wellness and Sport in Society: An Introduction	Hwss 2000
Experiential Learning in Health, Wellness and Sport in Society	Hwss 3000
Seminar in Health, Wellness and Sport in Society	Hwss 4000
<i>*Students must be accepted into the Certificate in Health, Wellness and Sport</i>	

History

The Trouble with Normal	Hist 3201
History of Medicine	Hist 3202
History of the Body, Health and Sexualities, 1400-1900.....	Hist 3203

Intercultural Studies

Intercultural Communication	Icst 1000
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Management

Occupational Health and Safety	Mgmt 3392
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Philosophy

Ethics	Phil 2302
Science and Society.....	Phil 2318
Bioethics	Phil 2368

Political Science

Public Administration	Poli 3330
Public Policy Challenges: Gender, Race and Class	Poli 4449

Religion

Death	Rels 1352
Spirituality and Work.....	Rels 2330
Science and Religion	Rels 3349

Social Justice and Community Studies

Race, Racism and Colonialism	Sjcs 2220
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Sociology

Sociology of Health and Illness.....	Soci 3316
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Note that many upper-level courses require introductory courses as prerequisites. Please see the Calendar for details.