

# HEALTH SCIENCES, B.H.SC.

## Degree Requirements

The Bachelor of Health Sciences (B.H.Sc.) degree is a four year interdisciplinary program that incorporates science, humanities and social science to provide students with an integrative perspective on health. The BHSc provides students with an interdisciplinary background and skill set that will contribute to their preparation for a future in health-related careers. This interdisciplinary skill set is seen as advantageous for students applying for education in professional health programs and graduate studies.

The Bachelor of Health Sciences (B.H.Sc.) Degree consists of 120 credit hours.

Students should consult the Academic Calendar to ensure that they have the appropriate pre- or co-requisites before they attempt to register in a course. A number of courses are cross-listed between departments/faculties. Students are strongly encouraged to seek the advice of the Academic Advisor in the Interdisciplinary Health Program in order to plan their programs.

Course	Title	Hours
<b>Year 1</b>		
BIOL 1410	Anatomy of the Human Body	3
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics <sup>2</sup>	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties <sup>2</sup>	3
CHEM 1120	Introduction to Chemistry Techniques <sup>2</sup>	3
HEAL 1500	Foundations of Human Biology 1 <sup>3</sup>	3
HEAL 1502	Foundations of Human Biology 2 <sup>3</sup>	3
INDG 1220 or INDG 1240	Indigenous Peoples in Canada, Part 1 or Indigenous Peoples in Canada, Part 2	3
PSYC 1200 or SOC 1000	Introduction to Psychology or Introduction to Sociology	6
STAT 1000	Basic Statistical Analysis 1	3
3 credit hours of Free electives if SOC 1000 is taken		
<b>Hours</b>		<b>30</b>
<b>Year 2</b>		
BGEN 2000	Medical Cell Biology	3
CHEM 2730	Elements of Biochemistry 1	3
CHEM 2740	Introduction to the Biochemistry Laboratory	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HNSC 2000 or PSYC 2250	Research Methods and Presentation <sup>4</sup> or Introduction to Psychological Research	3
IMMU 2000	Fundamentals in Immunology	3
PHGY 1030	Fundamentals of Medical Physiology	6
3 credit hours of Free Electives		3
<b>Hours</b>		<b>30</b>

<b>Year 3</b>		
BGEN 3010	Genetics in Biomedicine <sup>5</sup>	3
FMLY 3750	Fundamentals of Health Promotion	3
FMLY 3780 or FMLY 3790	Introduction to the Development of Programs for Children and Families or Introduction to the Evaluation of Programs for Children and Families	3
HEAL 3000	Introduction to Social Epidemiology	3
HEAL 3600	Integration of Health Determinants for Communities	3
HEAL 3610	Mechanisms of Disease 1	3
PHAC 3000	Foundations of Pharmacology	3
PHIL 2740	Ethics and Biomedicine <sup>6</sup>	3
3 credit hours of Free Electives		3
3 credit hours of Program Electives <sup>7</sup>		3
<b>Hours</b>		<b>30</b>

<b>Year 4</b>		
ANAT 4010	Human Embryology	3
HEAL 4600	Integration of Health Determinants for Canada and the World	3
HEAL 4620	Health Sciences Capstone	3
HEAL 4630	Mechanisms of Disease 2	3
PHAC 4030	Drugs in Human Disease I	3
PHAC 4040	Drugs in Human Disease II	3
6 credit hours of Program Electives <sup>7</sup>		6
6 credit hours of Free Electives		6
<b>Hours</b>		<b>30</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart.

<sup>2</sup> The former CHEM 1300 and the former CHEM 1310 may be used as course equivalents if completed prior to September 2021.

<sup>3</sup> BIOL 1020 and BIOL 1030 may be used as course equivalents if completed prior to September 2021.

<sup>4</sup> Students are advised that they must complete 3 credit hours from the Written English list within their first 60 credit hours, if they do not plan to take HNSC 2000.

<sup>5</sup> Students interested in applying to the MSc in Genetic Counselling must take BGEN 3022 and BGEN 3024 instead of BGEN 3010.

<sup>6</sup> PHIL 2410 may be used in place of PHIL 2740.

<sup>7</sup> Of the 9 credit hours of program electives, 6 credit hours must be selected from the science elective list. HEAL 4650 can be completed a maximum of two times.

## Bachelor of Health Sciences Program Electives List

Please note, a course completed as a core requirement may not also be used as an elective.

**SCIENCE ELECTIVES****Faculty of Agricultural and Food Sciences**

Course	Title	Hours
AGRI 2180	Introductory Toxicology	3
FOOD 4150	Food Microbiology 1	3
HNSC 2130	Nutrition Through the Life Cycle	3

**CLAYTON H. RIDDELL FACULTY OF ENVIRONMENT EARTH AND RESOURCES**

Course	Title	Hours
ENVR 2180	Introductory Toxicology	3

**RADY FACULTY OF HEALTH SCIENCES**

Course	Title	Hours
HEAL 4640	Mechanisms of Disease 3	6

**MAX RADY COLLEGE OF MEDICINE**

Course	Title	Hours
BGEN 3022	Introduction to Human Genetics A	3
BGEN 3024	Introduction to Human Genetics B	3

**FACULTY OF SCIENCE**

Course	Title	Hours
BIOL 2380	Introductory Toxicology	3
BIOL 3290	Medicinal and Hallucinogenic Plants	3
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2750	Elements of Biochemistry 2	3
MATH 1230	Differential Calculus	3
MATH 1500	Introduction to Calculus	3
MBIO 1220	Essentials of Microbiology	3
MBIO 2420	Introductory Virology	3
MBIO 2750	Elements of Biochemistry 2	3
PHYS 1020	General Physics 1	3
PHYS 1030	General Physics 2	3
PHYS 1050	Physics 1: Mechanics	3
PHYS 1070	Physics 2: Waves and Modern Physics	3
STAT 2000	Basic Statistical Analysis 2	3
STAT 3000	Applied Linear Statistical Models	3

**SOCIAL SCIENCE ELECTIVES****Faculty of Arts**

Course	Title	Hours
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ECON 3690	Economic Issues of Health Policy	3
ECON 3692	Economic Determinants of Health	3
HIST 2020	The Métis in Canada (C)	3
INDG 1220	Indigenous Peoples in Canada, Part 1	3

INDG 1240	Indigenous Peoples in Canada, Part 2	3
INDG 2020	The Métis in Canada	3
INDG 2110	Introduction to Indigenous Community Development	3
INDG 2540	Indigenous in the City	3
INDG 3100	Indigenous Healing Ways	3
INDG 3170	Indigenous Peoples and Racism in Canada	3
INDG 3240	Indigenous Medicine and Health	3
INDG 3330	Indigenous Science, Technology, and Society	3
PSYC 2250	Introduction to Psychological Research	3
PSYC 2260	Introduction to Research Methods in Psychology	3
PSYC 2290	Child Development	3
PSYC 2360	Brain and Behaviour	3
PSYC 2440	Behaviour Modification Principles	3
PSYC 2490	Abnormal Psychology	3
PSYC 3070	Adult Development	3
PSYC 3130	Introduction to Health Psychology	3
PSYC 3150	Behaviour Modification Applications	3
PSYC 3310	Adolescent Development	3
SOC 1000	Introduction to Sociology	3
SOC 2330	Social Psychology in Sociological Perspective	3
SOC 2390	Social Organization	3
SOC 2460	The Family	3
SOC 2490	Sociology of Health and Illness	3
SOC 2620	The Sociology of Aging	3
SOC 3540	The Sociology of Health Care Systems	3
SOC 3660	Sociology of Mental Disorder	3
SOC 3770	Women, Health and Medicine	3

**Faculty of Kinesiology and Recreation Management**

Course	Title	Hours
KIN 2610	Health and Physical Aspects of Aging	3
KPER 1200	Physical Activity, Health and Wellness	3
REC 2650	The Social Aspects of Aging	3

**Rady Faculty of Health Sciences**

Course	Title	Hours
HEAL 1600	Health and Health Professions	3
HEAL 4650	Research Project in Interdisciplinary Health	3

**College of Nursing**

Course	Title	Hours
NURS 2610	Health and Physical Aspects of Aging	3
NURS 3330	Women and Health	3
NURS 3400	Men's Health: Concerns, Issues and Myths	3
NURS 4520	Professional Foundations 5: Interprofessional and Collaborative Practice	3

**Max Rady College of Medicine**

Course	Title	Hours
FMLY 1000	Families in Contemporary Canadian Society	3
FMLY 1010	Human Development in the Family	3
FMLY 1012	Introduction to Social Development	3
FMLY 1420	Family Management Principles	3
FMLY 2012	Development, Conflict, and Displacement	3

FMLY 2400	Family Financial Health	3
FMLY 2500	Diversity and Families	3
FMLY 2600	Foundations of Childhood Developmental Health	3
FMLY 2650	The Social Aspects of Aging	3
FMLY 2800	Family Violence	3
FMLY 3012	Theories of Social Development	3
FMLY 3220	Death and the Family	3
FMLY 3240	Families in Later Years	3
FMLY 3330	Parenting and Developmental Health	3
FMLY 3400	Families as Consumers	3
FMLY 3470	Selected Studies in the Family I	3
FMLY 3600	Adolescents in Families and Society	3
FMLY 3780	Introduction to the Development of Programs for Children and Families	3
FMLY 3790	Introduction to the Evaluation of Programs for Children and Families	3
FMLY 3800	Conflict Resolution in the Family	3
FMLY 3802	Intimate Partner Violence	3
FMLY 3806	Children, Violence and Rights	3
FMLY 4012	Social Development Policies	3
FMLY 4220	Aging and Risk in a Global Context	3
FMLY 4300	Field Experience	6
FMLY 4330	Management of Family Stress	3
FMLY 4400	Family Economics: Poverty and Wealth	3
FMLY 4470	Selected Studies in the Family II	3
FMLY 4480	Work and Family Issues	3
FMLY 4602	Family Relationships, Health and Well-being	3
FMLY 4604	Children in Adversity	3
FMLY 4606	A Social Justice Perspective on Indigenous Maternal and Child Health	3
FMLY 4802	Family Violence Prevention	3

### Faculty of Social Work

Course	Title	Hours
SWRK 2040	Social Welfare Policy: Analysis and Advocacy	3
SWRK 2650	The Social Aspects of Aging	3