

Faculty of Medicine

Summary of Degree Programs

Degrees Offered

Undergraduate	Health Sciences	Medical Education
	BHSc Honours	MD
	BHSc Honours co-op	
	BHSc Honours INTE	
Graduate	Graduate Science Education	
	MBT	
	MCM	
	MSc	
	PhD	

Undergraduate

The Faculty of Medicine offers a four-year Bachelor of Health Sciences Honours (BHSc Honours) degree and a three-year Doctor of Medicine (MD) degree.

Graduate

Graduate work leading to the Master of Biomedical Technology, Master of Community Medicine, Master of Science and Doctor of Philosophy degrees is offered by the Faculty of Medicine under the administration of the Faculty of Graduate Studies. Details of these programs appear in the Faculty of Graduate Studies calendar.

Faculty Information

Contact Information

Bachelor of Health Sciences

Location: Health Sciences Centre G245

Student Information: (403) 210-9730

E-mail address: bhsc@ucalgary.ca

Web page URL: www.med.ucalgary.ca/bhsc

Doctor of Medicine

Location: Health Sciences Centre G302

Student Information: (403) 220-4262

E-mail address: mailto:staylor@ucalgary.ca

Web page URL: www.ucalgary.ca/md/

Bachelor of Health Sciences Honours

I. Summary of Programs

Coordinated by the Faculty of Medicine and in cooperation with the Faculties of Science, Social Sciences, Humanities, and Kinesiology, the Faculty of Medicine offers an undergraduate degree in Health Sciences, the Bachelor of Health Sciences Honours (BHSc Honours), consisting of three majors. (Details on majors are given in Section V.) Because of the admissions standard and GPA requirements, it is expected that most students will attain Honours standing. However, those students who progress to the fourth year but do not attain a cumulative GPA of 3.30 over the last 30 half-course equivalents (HCE) will graduate with a BHSc. The BHSc Honours degree will normally take four years, with the exception of the Co-operative Education/Internship programs, which require five years or more. Students are selected through an admissions process and have direct entry into the first year. The deadline for the application package is April 1. Complete application packages will be reviewed starting February 15.

A Health Sciences Minor is available in Health and Society. (Details are given in Section V.)

II. Faculty Student Affairs

The BHSc Undergraduate Office and undergraduate departmental advisors in key participating departments and Faculties advise students. Inquiries related to Faculty Regulations (Section III), Admissions (Section IV) and course requirements (Section V) should be directed to the Faculty of Medicine BHSc Undergraduate Office.

III. Faculty Regulations

Students in the Faculty of Medicine are governed by the regulations in this section of the Calendar as well as by the general University regulations in the section titled Academic Regulations. For the precise interpretation of any statement or regulation, students should feel free to contact the Assistant Dean Undergraduate Science Education (USE) in the BHSc Undergraduate Office, Faculty of Medicine. The Assistant Dean (USE) is responsible for all undergraduate BHSc student affairs in the Faculty.

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Enrollment Limitations

Enrollment limits may be in effect for some courses in the Faculties of Medicine, Science, Social Sciences, and Humanities.

Degree Requirements

The following general requirements apply to all undergraduate bachelors programs in the Faculty of Medicine:

A. Degree Programs

In order to graduate a student must present an approved list of courses completed with passing grades. This list will be referred to as the major. The major must satisfy the following conditions:

- The major must contain at least 41 HCE with at least 22 HCE numbered 300 or above.
- Only one HCE in the major may be graded a "D" or "D+."
- A minimum GPA of 3.60 over the last 30 HCE will be eligible for a First Class Honours designation. Refer to Section B "First Class Honours Requirements."
- A minimum GPA of 3.30 must be maintained over the last 30 HCE for an Honours designation.
- Please refer to "Student Standing" for a description of "satisfactory standing."
- No more than 10 HCE taken at other institutions and acceptable for transfer credit may be included in the degree.
- Candidates for Honours have a maximum of five years in which they are registered in courses to complete the required programs.
- Candidates for the Honours Internship program have a maximum of six years in which they are registered in courses to complete the required programs.

Note: These requirements may change with every Calendar issue. A given Calendar entry applies to the academic year beginning on July 1 and ending on the following June 30. The time of entry into a major in the Faculty of Medicine is defined as the first session after admission to the major during which a student successfully completes any courses applicable to the major. A student's major is subject to the course requirements that are in the Calendar current at the time of entry into the BHSc Honours, and a student is allowed five years for a non Co-operative Education/Internship and 6 years for a Co-operative Education/Internship program,

counted from the time of entry into the major, to graduate under these requirements. Students who exceed the allotted time limit must consult with the Assistant Dean (USE), who will decide on an acceptable set of course requirements for graduation.

Note: A student who fails to maintain the necessary performance standards or who decides not to continue in the Honours degree may transfer to another Faculty program, subject to that program's admission requirements.

B. First Class Honours Requirements

In addition to the Honours' requirements, first class designation requires successful completion of a program major equivalent to 41 HCE with a GPA of at least 3.60 over the last 30 HCE. A student who has taken part of his/her course work at another university may be granted a degree with First Class Honours at the discretion of the Faculty.

C. Co-operative Education or Internship Options

The Faculty of Medicine has two Internship programs (Bioinformatics and Biomedical Sciences majors) and one Co-operative Education program (Health and Society major). For general information on Co-operative Education and Internship programs refer to the Co-operative Education/ Internship section of this Calendar. For specific program details see Section V.

Internship options in the Faculty of Medicine will extend programs (Bioinformatics or Biomedical Sciences) to five years and may include either one twelve month or one sixteen month term of supervised work experience in industrial, government, or university establishments. Apart from this work experience, the degree requirements are the same as those for the major programs.

Co-operative Education options in the Faculty of Medicine may extend the Health and Society program to five years and include a co-operative education component (preferably during the summer) of supervised work experience in industrial, government, or university establishments. Apart from this work experience, the degree requirements are the same as those for the major program.

Students who wish to enter a Co-operative Education/Internship program are urged to discuss their pre-admission course selection with the Assistant Director/Co-operative Administrator as early as possible.

The general deadlines for admission to a Co-operative Education program are May 1, September 1 and December 1. The general deadline for admission to the Internship program in the Faculty of Medicine is December 1. Additional admission deadlines may be available for some Co-operative Education/Internship programs as listed in the Calendar section of the program major. Applications for admission to a Co-operative Education/Internship program must be submitted to the Career Services Office on forms available from that Office.

D. Minor Programs

A Minor is available in Health and Society. The course requirements are listed in Section V (Program Details). The GPA over all courses counting towards the Minor must be at least 2.00.

Course Selection and Registration

A. Accuracy of Registration

Students are responsible for ensuring that their annual course selections are in accordance with all Calendar requirements, including the completion of prerequisite courses with a satisfactory grade and registration in corequisite courses as appropriate. Students are advised not to register in a course unless they have achieved a grade of at least "C-" in each prerequisite course. It is the responsibility of students to ensure that they meet all prerequisite requirements. A student who has received credit for a course without having the normal prerequisite course(s) may not subsequently register in the prerequisite course(s) for program credit. Taking or repeating a course that is a prerequisite for a higher level course after having completed the higher level course with a grade of "C-" or better will only be allowed with the permission of the Assistant Dean (USE). Registration in any course(s) contrary to regulations may be cancelled by the Faculty after the beginning of classes. Registration must be appropriate to the major being followed. Students with inappropriate course selections may have their registration cancelled by the Assistant Dean (USE). Students should seek advice from the Assistant Dean (USE) or the staff of the Faculty Student Affairs Office.

Students are responsible for ensuring that they meet degree and program major requirements. Although the Program Office endeavours to assist all students as they proceed in the various majors, a final and thorough check is not done until application for graduation. Any departure from standard requirements must receive prior authorization in writing from the Assistant Dean (USE). It is strongly recommended that students consult with the Assistant Dean (USE) before submitting their final registration.

First-year students should obtain a copy of the Registration Guide for New Undergraduate Students from the Registrar's Office.

B. Withdrawal from Courses

Students will not be permitted to withdraw more than once from a particular course. Students will be required to withdraw from the Faculty of Medicine if they have accumulated a total of more than five full-course equivalent withdrawals while in attendance at the University of Calgary. A student who wishes to withdraw from a course must do so before the deadline specified in the Academic Schedule.

C. Repetition of Courses

A student will be permitted to repeat a particular course only once. This regulation

applies not only to individual courses but also to sets of courses where it is stated that credit for more than one of the sets is not allowed. A withdrawal counts as an attempt.

D. Opportunities to Take Courses at Another Institution for Transfer of Credit

Students may be authorized to take some program course work at another university if registration as a visiting student is acceptable to that university. Applications for such authorization must be made as early as possible in writing to the Assistant Dean (USE) and must be accompanied by full details of the proposed courses and the total hours of instruction (machine copies of actual calendar descriptions are preferred). The student will be advised officially by letter of the acceptability of the proposed courses for transfer credit in the program and an appropriate letter will be sent to the Registrar at the other university. It will be the responsibility of the student to ensure that an official transcript of grades is forwarded directly to the Registrar of this University in order that appropriate credit may be officially recorded.

E. Credit in Courses by "Special Assessment"

Students who feel that they know the material covered in a certain course without having received formal University credit may apply for "special assessment" in the course. Students should obtain the form headed "Permission to Take Courses by Special Assessment" from the Registrar's Office and submit their application to the Faculty offering the course. A course in which the student was previously registered may not be taken subsequently by special assessment, nor may any course be attempted more than once in this way. The Faculty will not allow more than five full-course equivalents completed by special assessment to count towards a degree. See also the general University regulations concerning special assessment.

Assessment

A. Missed Components of Term Work

Any student who is absent from a test or fails to complete a laboratory assignment or similar work for legitimate reasons must discuss an alternative course of action with the instructor. The regulations covering such circumstances are outlined in the sections titled "Attendance" and "Deferral of Work" in the Academic Regulations section of this Calendar. In such cases the instructor must be notified within 48 hours.

B. Deferral of Final Examination

See the general University regulations governing the deferral of final examinations. In order to apply for a deferral of a final examination, students must pick up an application form in the Registrar's Office or download it from the Registrar's Website at: <http://www.ucalgary.ca/UofC/departments/REGISTRAR/exam> and submit the completed form to the Assistant Dean (USE).

Students seeking a deferment of a final examination for medical reasons must submit a Physician/Counsellor Statement form, which they can obtain from the Registrar's office or download from the website. A medical certificate stating only that a student has been seen by a physician is insufficient. Misreading the examination timetable is not a valid reason for requesting a deferred final examination.

Student Standing

A. Performance Review, Probationary Status and Dismissal

The academic standing of each student registered in the Faculty will be reviewed annually following the Winter Session as per the GPA Requirements table.

Notes:

1. *University regulations permit students to be on probation only once during their degree. Therefore, students whose first year has merited admission to Honours on probation will have to maintain a GPA of at least 3.30 in Years 2, 3, and 4 in order to continue in their chosen program.*
2. *At the time of graduation, students who have not achieved a GPA of 3.30 over the last 30 HCE will be awarded a BHSc (i.e., without Honours), provided that the minimum cumulative GPA attained is greater than or equal to 2.00.*
3. *Students not achieving Honours standing due to the failure to complete all required first year courses (see list below), must complete these required courses within their first 20 half-course equivalents (with a minimum GPA of 3.30) in order to be admitted into Honours and remain in the program. Exceptions may be granted, due to exceptional circumstances such as serious illness or disability, at the discretion of the Assistant Dean (USE).*

B. Dean's List

The Dean's List recognizes the outstanding academic achievement of students. To be included, a student must achieve a grade point average of at least 3.50 over all courses taken in the preceding Fall and Winter Sessions, with a minimum of 10 HCE

to be counted. A statement of inclusion on the Dean's List will be recorded on the student's transcript.

Students completing a Co-operative Education/Internship Work Term in either a Fall or Winter Session will be eligible for inclusion on the Dean's List provided they have completed two and one-half courses in the complementary Fall or Winter Session and have passed the Work Term.

IV. Admissions

The deadline for application for admission to the BHSc Honours in the Faculty of Medicine is April 1.

Admission to the Faculty involves at the same time admission to one of the three program majors. If the applicant is not admitted to the BHSc Honours the application will be reviewed for admission to alternative University of Calgary degree programs designated by the applicant. Please see below regarding admission of transfer students into the second year of the BHSc Honours. If an application is unsuccessful, a new application must be submitted the following year.

Note: *The maximum enrollment for each major of the BHSc Honours is 25 students/major/year. Admission to these majors is based both on the admission requirements listed below and additional selection criteria in the appropriate major.*

Admission to Year 1 is limited to those who meet the requirements set out below and have completed no more than two transferable half-course equivalents from a recognized post-secondary institution. All others must apply for year two after completing at least 8 half-course equivalents at the University of Calgary, or from a recognized post-secondary institution, including the required courses outlined below under year 2 admission.

Year 1 Admission

- (a) Application deadline: April 1
Transcript deadline: August 1
- (b) High school matriculation (or equivalent), with a minimum average of 85.0% calculated on the following subjects (or equivalent): English 30; Pure Mathematics 30 (or Mathematics 30) with

minimum grade of 70%; Biology 30; Chemistry 30; and one course from Group A, B, C, or D.

- (c) Admission is competitive. Only 25 spaces are available in each major each year. Therefore, meeting the minimum standards as set out in (b) does not guarantee admission. Those with more than two HCE transferable courses must apply to Year 2. See above for details.
- (d) **Applications will only be accepted electronically.** All applicants are required to submit supplementary information. This information will be used to determine admission in the event of students presenting identical matriculation averages competing for the last position as defined in (b). Supplementary entrance requirements will consist of an essay and other written components. The questions will be determined each year by the admissions committee. Students will be asked to outline their interests and goals and what they hope to get out of their BHSc Honours program.
- (e) An admissions committee will review applications and all applicants will be informed of their status in writing.
- (f) The Faculty of Medicine will consider applicants for Early Admission for the upcoming year in February. Applicants currently in high school should refer to Early Admission for High School Students in the Academic Regulations section of this Calendar for details. It is to the applicant's advantage to apply for admission and submit the supplementary information as soon as possible. The Faculty of Medicine will start making conditional offers of acceptance by April 1.

Year 2 Admission

- (a) Application deadline: April 1
Transcript deadline: June 15
Spring or Summer Session courses completed in the year of application will not be considered.
- (b) Transfer students must have completed at least 8 half-course equivalents. Transfer students must present a GPA of at least 3.30 over the last 10 half courses completed (if 10 or more have been completed) and a GPA of at least 3.30 over the following courses (or equivalent):

Biomedical Sciences Major

Biology 231, Chemistry 201, 203, Mathematics 251 (or 249), Physics 211 (or 221), 223, and one of Biology 233, Anthropology 201, Archaeology 203, Psychology 205, Geography 203

Bioinformatics Major

Biology 231, Computer Science 231, 233, Mathematics 251 (or 249), 271, and one of Biology 233, Kinesiology 261, Anthropology 201, Archaeology 203, Psychology 205, Geography 203, Sociology 201, Philosophy 279

GPA Requirements

End of Year 1	Year 2 and 3	Year 4 and Graduation
3.30 or above: admitted to Honours program	3.30 or above: satisfactory standing	3.30 or above: BHSc Honours degree
2.75 - 3.29: admitted to Honours program on probation (see Note 1)	2.75 - 3.29: probation (see Note 1)	2.00 – 3.29: BHSc degree
less than 2.75: required to withdraw from BHSc Honours	less than 2.75: required to withdraw	less than 2.00: no degree

Health and Society Major

Biology 231, Mathematics 251, Health and Society 201, and three of Psychology 205, Sociology 201, Anthropology 203, Geography 203, Economics 201*, 203*

*Students considering the Health Economics concentration in the BHSc Honours are required to complete both Economics 201 and 203, as they are prerequisites for most 300-level Economics courses.

- (c) Subject to (b) above, a minimum of 5 transfer students will be admitted into the second year of each major.
- (d) Admission is competitive. Therefore, meeting the minimum standards as set out in (b) under Year 1 Admission above does not guarantee admission.
- (e) All applicants are required to submit supplementary information on the form provided by the Faculty of Medicine. **Applications will only be accepted electronically.** The supplementary information form is to be submitted directly to the Faculty of Medicine. The supplementary information will be used to determine admission in the event of students presenting identical grade point averages for the final seats as defined in (b). Supplementary entrance requirements will consist of an essay and other written components. The questions will be determined each year by the admissions committee. Students will be asked to outline their interests and goals and what they hope to get out of their BHSc Honours program.
- (f) An admissions committee will review applications and all applicants will be informed of their status in writing.
- (g) The Faculty of Medicine will start processing applications for the upcoming year in February. Incomplete files will not be reviewed. Applicants who are currently completing the required courses should refer to Early Admission for Post-Secondary Students in the Academic Regulations section of this Calendar for details. It is to the applicant's advantage to apply for admission and submit all necessary transcripts, including the supplementary information, as soon as possible. The Faculty of Medicine will start making conditional offers of acceptance by April 1.

V. Program Details**Biomedical Sciences Major**

YEAR 1	
Fall	Winter
Biology 231	Biology 233 or Life Sciences Option ¹
Chemistry 201	English ²
Mathematics 251 or 249	Chemistry 203
Physics 211 or 221	Physics 223
Non-Science Option	Medical Science 205
Medical Science 203	

¹Life Sciences Option: Anthropology 201, Archaeology 203, Psychology 205, Geography 203, Kinesiology 251, 261
²Any 200-level half-course English or Comparative Literature 201 or 203

YEAR 2	
Fall	Winter
Computer Science 001 (Block Week)	
Chemistry 351	Biology 331
Medical Humanities ¹	Biochemistry 393
Open Option ²	Chemistry 353
Biology 311 ³	Cellular, Molecular and Microbial Biology 343 ³
Medical Science 303	Medical Science 305

¹Suggested Medical Humanities: Philosophy 249, 275, 279, 313, English 383, Anthropology 341, Health and Society 201, Religious Studies 333, 337, Comparative Literature 399

²Suggested Open Option: A Medical Humanities option from ¹ above, Anthropology 201, Archaeology 203, 305, Biology 313, Geography 203, Kinesiology 253, 263, 355, Mathematics 221, 253, Psychology 205

³Admittance into the BHSc Honours will be accepted as a prerequisite for these two courses in lieu of Biology 233.

YEAR 3	
Fall	Winter
Computer Science 002 (Block Week)	
Medical Science 502 or Zoology 461	Medical Science 502 or Zoology 463
Medical Science 402	Medical Science 402
Biochemistry 443	Biology 315 or Statistics 333
Medical Science 401	Open Option ¹
Medical Science 403	Medical Science 405

¹Suggested Open Option: Cellular, Molecular and Microbial Biology 403, 411, 413, 421, 427, 431, 443, Biochemistry 471, Archaeology 305, Health and Society 301, Philosophy 367, 379, Science, Technology and Society 325, 327, Psychology 353, 375, Sociology 321, 373, Kinesiology 363, 369

YEAR 4	
(or Year 5 for students exercising Internship Option (see below))	
Fall	Winter
Medical Science 001 (Block Week)	Medical Science 002 (Block Week)
Medical Science 504 ¹	Medical Science 506 ¹
Medical Science 508	Medical Science 508
Biomedical Option ²	Biomedical Option ²
Open Option ³	Biomedical Option ²

¹The research projects are full courses offered in a single session. They will be either laboratory or information based, as appropriate to the primary discipline and question posed. Students will be expected to spend a minimum of 15 hours/week conducting research. The courses will culminate in a

Research Symposium Day during which students will present their research before an audience of peers and mentors, a poster presentation in which the students will share their research with the faculty and staff, and the submission of a written research thesis to their supervisor.
²Suggested Biomedical Options: Any courses listed as Year 3 options, plus Medical Science 503 (Biology 503), 509, 511, 515 (Biology 515), 537 (Biochemistry 537), 561 (Cellular, Molecular and Microbial Biology 561), Cellular, Molecular and Microbial Biology 505, 511, 519, 523, 533, 549, Biochemistry 531, 543, 547, 551, 555, Biotechnology 561, 563, Kinesiology 433, 463, 465, Zoology 531
³Suggested Open Option: Archaeology 305, Health and Society 301, Philosophy 367, 379, 565, Science, Technology and Society 325, 327, Sociology 321, 373, Religious Studies 473

Internship Option

Students enrolled in the Biomedical Sciences major will have the option to extend their degree by one year and participate (after completion of Year 3) in an internship work term. Students may complete one 16-month, one twelve-month, or two six-month work term placements and be registered as full-time students of the University of Calgary. Work term placements may be available in academic, governmental, and industrial settings. Selection for participation in the Internship option will be based on academic achievement, and students will be interviewed to ensure their suitability. Students will be required to complete a Work Orientation course prior to their placement. Following completion of the work term(s), students will be required to submit a work term report to the Internship Coordinator and will then enter their final year of studies (described as Year 4/5 above).

Bioinformatics Major

YEAR 1	
Fall	Winter
Biology 231	First Year Option ¹
Chemistry 201	Chemistry 203
Mathematics 251 or 249	Mathematics 271
Computer Science 231	Computer Science 233
Mathematics 221	Medical Science 205
Medical Science 203	

¹First Year Option: Biology 233, Kinesiology 261, Anthropology 201, Archaeology 203, Psychology 205, Geography 203, Sociology 201, Philosophy 279

YEAR 2	
Fall	Winter
Computer Science 001 (Block Week)	Computer Science 002 (Block Week)
Chemistry 351	Chemistry 353
English ¹	Biology 331
Computer Science 331	Computer Science 333
Biology 311 ²	Computer Science 335
Medical Science 303	Medical Science 305

¹Any 200-level half-course English or Comparative Literature 201 or 203

²Admittance into the BHSc Honours will be accepted as a prerequisite for Biology 311 in lieu of Biology 233.

YEAR 3	
Fall	Winter
Medical Science 502 or Zoology 461	Medical Science 502 or Zoology 463
Computer Science 355	Medical Science 401
Computer Science 461	Biochemistry 393
Open Option ¹	Computer Science 4XX
Medical Science 403	Medical Science 405

¹Suggested Open Option: Philosophy 249, 275, 279, 313, English 383, Anthropology 341, Health and Society 201, Religious Studies 333, 337, Comparative Literature 399

YEAR 4	
(or Year 5 for students exercising Internship Option (see below))	
Fall	Winter
Medical Science 504 ¹	Medical Science 506 ¹
Computer Science 500-level Option	Biochemistry 443
Medical Science 675	Bioinformatics Option ²
Computer Science 471	Open Option ³

¹ The research projects are full courses offered in a single session. They may be either laboratory or information based, as appropriate to the primary discipline and question posed. Students will be expected to spend a minimum of 15 hours/week conducting research. The courses will culminate in a Research Symposium Day during which students will present their research before an audience of peers and mentors, a poster presentation in which students will share their research with the faculty and staff, and the submission of a written research thesis to their supervisor.

²Suggested Bioinformatics Option: Any courses listed as Year 3 options, plus Medical Science 509, 511, 605 (Computer Science 605), 641.04, Computer Science 531

³Suggested Open Option: Biochemistry 531, 537, 547, 555, Religious Studies 473, Archaeology 305, Health and Society 301, Philosophy 367, 379, 565, Science, Technology and Society 325, 327, Sociology 321

Internship Option

Students enrolled in the Bioinformatics major will have the option to extend their degree by one year and participate (after completion of Year 3) in an internship work term. Students may complete one 16-month, one twelve-month, or two six-month work term placements and be registered as full-time students of the University of Calgary. Work term placements may be available in academic, governmental and industrial settings. Selection for participation in the Internship option will be based on academic achievement, and students will be interviewed to ensure their suitability. Students will be required to complete a Work Orientation course prior to their placement. Following completion of the work term(s), students will be required to submit a work term report to the Internship Coordinator and will then enter their final year of studies (described as Year 4/5 above).

Health and Society Major

Upon completion of Year 1, Health and Society students are required to declare a "Social Sciences area of concentration." This must be selected from Anthropology, Economics, Psychology, Geography, and Sociology. Theory/concepts, research methods, statistics, and qualitative methods course selection must correspond to the student's chosen concentration discipline and must be chosen from the "Grid for Social Sciences Concentration Courses in BHSc Honours (Health and Society)."

YEAR 1	
Fall	Winter
Health and Society 201	Life Sciences Option ¹
Mathematics 251 or 249	Major Option ²
Major Option ²	Major Option ²
English ³	Open Option
Biology 231	Medical Science 205
Medical Science 203	

¹Suggested Life Sciences Option: Biology 233, Kinesiology 261, Anthropology 201, Archaeology 203

²Major Options: Psychology 205, Sociology 201, Anthropology 203, Geography 203, Economics 201*, 203*

³Any 200-level half-course English or Comparative Literature 201 or 203

*Students considering the Health Economics concentration in the BHSc Honours are required to complete both Economics 201 and 203.

YEAR 2	
Fall	Winter
Health and Society 301	Health and Society 311
Biology 233 or 305	Philosophy 367
Concentration Course	Concentration Course
Open Option	Medical Humanities Option ¹
Medical Science 303	Medical Science 305

¹Suggested Medical Humanities Option: Philosophy 249, 275, 279, 313, English 383, Religious Studies 333, 337, Comparative Literature 399

YEAR 3	
Fall	Winter
Health and Society 401	Concentration Course
Health Concentration Discipline I ¹	Health Concentration Discipline II ¹
Concentration Course	Concentration Course
Open Option	Health Science Option ²
Medical Science 403	Medical Science 405

¹Health Concentration Discipline I and II: Students should choose the course corresponding to their concentration discipline and one other from Anthropology 341, Economics 379, Geography 411, Sociology 321

²Suggested Health Science Option: Archaeology 305, 589, 595, Communications Studies 401.03, Community Rehabilitation 205, 425, 573, 583, English 383, General Studies 301.08, Kinesiology 355, 369, 397, 453, Nursing

511, 531, 589, Philosophy 565, Psychology 347, 359, 375, 385, Science, Technology and Society 201, 325, 327, Social Work 319, 327, 329, 537, 539, 563, Women's Studies 321

Note: No more than one half-course equivalent of a student's open options may be filled with courses from the Health Science Options.

Note: No student may count more than three half-course equivalents from any one department or program in the fulfillment of recommended Health Science Options.

YEAR 4	
(or Year 5 for students exercising Co-operative Education Option (see below))	
Fall	Winter
Medical Science 504 ¹	Medical Science 506 ¹
Open Option	Health and Society 591
Concentration Course	Concentration Course
Health Science Option	Health Science Option

¹ The research projects are full courses offered in a single session. They may be either laboratory or information based, as appropriate to the primary discipline and question posed. Students will be expected to spend a minimum of 15 hours/week conducting research. The courses will culminate with a Research Symposium Day during which students will present their research before an audience of peers and mentors, a poster presentation in which students will share their research with the faculty and staff, and the submission of a written research thesis to their supervisor.

Co-operative Education Option

Students enrolled in the Health and Society major will have the option to extend their degree by one year and participate (after completion of Year 3) in a co-operative education work term. Students may complete one or two four-month work term placements and be registered as full-time students of the University of Calgary. Work term placements may be available in academic, governmental and industrial settings. Selection for participation in the Co-operative Education option will be based on academic achievement, and students will be interviewed to ensure their suitability. Students will be required to complete a Work Orientation course prior to their placement. Following completion of the work term(s), students will be required to submit a work term report to the Co-operative Education/ Internship Coordinator and will enter their final year of studies (described as Year 4/5 above).

Grid for Social Sciences Concentration Courses in BHSc Honours (Health & Society) ^{1,2}

	Anthropology	Economics	Geography	Psychology	Sociology
Research Methods	411	Statistics 213	339 or 391	312 ³	313
Statistics	307	315	333 ⁴	Not Required ⁵	311 ⁶
Qualitative Methods	357	One of Anthropology 357,	One of Anthropology 357, Psychology 413, or Sociology 413	413 Psychology 413, or Sociology 413	413
Theory/Concepts Discipline	365 and two of: 371, 379, 385, 473, Archaeology 305,	309 and 355 and at least one of: 313, 349, 379, 431, 589, 595	351 and two of: 321, 341, 365, 367, 425, 451, 463 483, 491	405 and two of: 305 345, 347, 351, 353, 355, 359, 375,	331 and 333 and one of: 303, 341, 355, 365, 373, 473 425, 427

¹In total, at least four theory/concepts courses are required.

²In Anthropology, Economics, Psychology and Sociology, three must be drawn from the list of the declared specialty; the remaining one half course may be drawn from the theory/concepts courses in other specialty areas.

³Psychology 312 is a full course, therefore the number of open options in the Psychology concentration will be reduced by one half course.

⁴Geography 447 recommended additionally

⁵Statistics content is covered in Psychology 312; however, it is recommended that Statistics 213 also be completed.

⁶Sociology 315 recommended additionally

Health and Society Minor

A Minor is available in Health and Society. The GPA over all courses counting towards the Minor must be at least 2.00.

The Minor is defined by the following courses:

- Health and Society 201, 301, 311, 401
- At least one full-course equivalent made up from the following courses: Anthropology 341, Economics 379, Geography 411, Psychology 487, Sociology 321
- At least two full-course equivalents made up of the following list: Anthropology 365, Archaeology 305, 589, 595, Biology 205, 231, 305, Communications Studies 401.03, Community Rehabilitation 205, 425, 573, 583, English 383, General Studies 301.08, Nursing 511, 531, 589, Philosophy 313, 367, Psychology 341, 351, 385, Science, Technology and Society 201, 325, 327, Sociology 333, Social Work 319, 327, 329, 537, 539, 563, Women's Studies 321

No course taken to fulfill Major field requirements may also be used in fulfillment of Minor field requirements, unless the course is required for both. If there is an overlap, an appropriate course from the options list may be substituted with the approval of the Assistant Dean (Undergraduate Science Education).

Note: No student may count more than three half-course equivalents from any one department or program towards the Health and Society Minor.

Doctor of Medicine

The Faculty of Medicine of the University of Calgary offers a three-year program leading to the degree of Doctor of Medicine (MD). The academic year consists of 11 months of instruction and one month of unassigned vacation time.

During the third and final year of undergraduate medical education, students are expected to identify an area for postgraduate training. Some students will be interested in medical specialties such as surgery or internal medicine, or in the specialty of family medicine; others will be interested in a career in research which might logically lead to the MSc and/or PhD degrees. Each student will spend at least two postgraduate years in the academic area in which he/she is interested.

Pattern of Education

The educational program of the University of Calgary Faculty of Medicine is based on the premise that the pattern of instruction should more closely resemble that of a graduate school than an undergraduate college. Accordingly, and particularly since medical education must continue for the student's entire professional life, considerable emphasis will be placed upon self-instruction resources available to them. Students also have the opportunity to examine and to use the expertise of the allied health professionals.

The University of Calgary medical student is exposed to patients from the time he or she is admitted to Medicine, and is able to study fundamental material in the context of clinical application.

The traditional pattern of medical education is being altered through the selection of some students who possess academic backgrounds other than the physical and biological sciences, and through the provision of a curriculum which merges "basic" and "clinical" medical sciences. The University of Calgary Faculty of Medicine

devotes resources to evaluating not only students, but also the faculty and teaching program. A mechanism is thereby provided for ongoing revision of the teaching program of the medical school. The medical school building has been designed to bring students and faculty into contact not only in lecture theatres and laboratories, but also in dining and lounge areas. The University of Calgary Medical Clinic, where the student can observe model care of patients, has been incorporated within the medical school, so that students may observe a health-team approach to provision of health care from the day they first enter medical school.

Admissions

Premedicine

The Faculty does not require that a student undertake a formal premedical program. Rather, nine courses are suggested as providing adequate preparation for entry into Medicine. While these might be viewed as "prerequisites," the Admissions Committee is prepared to waive certain courses for students who have pursued unusual educational programs. It is the intention of the Faculty to permit entry into Medicine of exceptional students of other disciplines, without requiring undue expenditure of their time on traditional "premedical" courses.

Requirements

Applicants to the University of Calgary Faculty of Medicine should ensure that they have also read the Office of Admissions' Information Brochure. The admissions requirements are currently under review. Please contact the Office of Admissions for current information.

Eligibility for Admission

The number of positions is currently limited to 100. The number of positions may be increased slightly over the next several years due to a physician shortage. As a provincial

university, the University of Calgary has a primary obligation to Canadian citizens residing in Alberta. Applications are invited from those students who are residents of other provinces, although priority will be given to residents of Alberta.

The Faculty of Medicine has a policy on admission of candidates who are neither Canadian citizens nor landed immigrants. We do not accept applications from individual international students. Presently, seats for international students are limited to those students who come from institutions/countries with whom the Faculty of Medicine has a formal, contractual agreement.

In selecting medical students, no consideration is given to the gender, race, religion, or socio-economic status of the applicant, nor to the vocation of his or her parent, guardian, or spouse.

Physical disabilities must not prevent the student, upon graduation, from communicating with patients, making observations, gathering and analyzing data necessary to arrive at medical judgements, and performing therapeutic interventions expected of a physician who has completed the educational program leading to an MD degree.

The Faculty of Medicine will not normally accept applications from students who have withdrawn, who have been required to withdraw, or who have been expelled from any school or college of medicine.

Educational Background

Students must have completed a minimum of two full years of university-level courses by the time of admission. (The Faculty of Medicine's definition of a full year is described in the Office of Admissions' Information Brochure. The brochure should be read in order to obtain the most factual information describing requirements. The brochure is available on the University of Calgary web page.) Most, however, will have completed a baccalaureate degree before admission to the Faculty of Medicine. Exceptional and academically well-qualified students who wish to be considered for acceptance with only two years of university education may apply between their first and second year of university.

The Faculty of Medicine does not require that students undertake a formal premedical program. Rather, the courses recommended below are suggested as providing the necessary background for medical studies. As completion of these courses does not guarantee admission, students should ensure that courses chosen will satisfy the degree requirements of the undergraduate faculty in which they are registered.

Recommended Courses

Applicants should satisfy the Admissions Committee that they are well prepared academically for entry into the Faculty of Medicine. Such preparation ordinarily will include a full university course in each of:

General chemistry
Organic chemistry

Biochemistry
Psychology or sociology or anthropology
English

General biology

Mammalian physiology or comparative physiology

Calculus

Physics

University of Calgary students should consider the following courses:

Chemistry 201/203 (General Chemistry)

Chemistry 351/353 (Organic Chemistry)*

Biochemistry 393/443 (Chemistry 351 is the prerequisite and 353 or 355 is the prerequisite or corequisite for Biochemistry 393.)*

One of Psychology 205, Sociology 201, Anthropology 201

Two of English 231, 233, 235, 237, 239 or one of 202 or 240

Biology 231/233

Zoology 361/363 or 461/463 (Physiology) (Biology 331, and one of Chemistry 351 or Biochemistry 341 or 393 or 441 are prerequisites and either Chemistry 353 or 355 are prerequisites or corequisites for Zoology 461.)

Physics 211 (or 221)/223

Mathematics 251/253 or 249/253

**Chemistry 341/Biochemistry 341 will be accepted for students majoring in the humanities or social and behavioural sciences in lieu of Chemistry 351/353 or 355 and Biochemistry 393/443.*

The Admissions Committee will consider applications from students who have completed other educational or training programs (for example, honours in physical science, engineering, or the humanities).

Admission/Registration Refusal

The University of Calgary reserves the right, the published regulations notwithstanding, to reject applicants for admission or registration in courses on the basis of their overall academic records even if they technically meet the entrance requirements, and on medical and other grounds.

Admissions Committee

The Admissions Committee of the Faculty of Medicine of the University of Calgary consists of representatives of the medical faculty, student physicians, the medical community, other disciplines, and the community at large. The Committee is charged with the selection of medical students on the basis of academic and non-academic qualifications. Approximately 270 applicants are invited for the final stage of the process, the on-site essay and the interview, on the basis of six criteria: post-secondary transcripts, Medical College Admission Test scores, a personal essay, employment history, extracurricular activities, and three letters of reference.

Medical College Admission Test

All applicants must write the Medical College Admission Test at the latest by the autumn of

the year before that for which admission is sought. MCAT scores will then be available to the Admissions Committee when considering applications. Applicants should contact the MCAT Program Office, P.O. Box 4056, Iowa City, Iowa 52243 (www.aamc.org/mcat), for details about the test and should instruct the organization to forward the results to the Admissions Committee. Candidates for this test should be aware that application to write the MCAT must be made at least six weeks before the date of the examination.

Applicants to the Faculty of Medicine should be aware also that the MCAT was revised in 1991. The results of previous examinations will not be considered.

Applications

Applications for the MD Program are available on our website. Applicants should note that the Office of Admissions will not accept facsimile transmission copies of transcripts. Also, the work of the Committee is greatly facilitated if applications are submitted as early as possible before the deadlines noted below. It is the responsibility of the applicant to ensure that the file is complete and that all necessary forms, official transcripts, letters of reference, and application fee are received by the Office of Admissions by the deadline dates indicated.

To obtain an application please visit www.med.ucalgary.ca/admissions. Applications can only be submitted online. Completion of this requires listing courses taken and grades obtained; stating the date of writing and scores obtained on the MCAT (if available); writing an essay; briefly describing employment history (if any) and extracurricular activities. The deadline for receipt by the Office of Admissions of the on-line application and the application cost of \$85.00 is November 15.

The Admissions Committee reviews all completed applications which have met the absolute requirements to determine which applicants will be granted an interview. The two absolute requirements are the written MCAT and that the applicant must have completed the equivalent of at least two years of full-time university education by the time of admission to this medical school and must have achieved a minimum grade point average as described in the Office of Admissions' Information Brochure. A complete application contains all the information described in the Information Brochure.

The deadline for receipt by the Office of Admissions of the three letters of reference, all official transcripts and official MCAT scores is January 4. Applicants will be notified by March 15 whether or not they will be invited for an interview.

If applications are considered successful at this stage, candidates are invited to attend an interview at the University of Calgary in March or April. Applicants must attend at their own expense. Before the interview, candidates are required to write an on-site essay on a topic assigned by the Admissions Committee. After the writing of the on-site

essay, an interview which lasts about one hour and is used to assess non-academic qualifications, is held.

Applicants will be notified of the Admissions Committee's decision by May 15. All applicants accepted into Medicine must forward a \$100 deposit within 30 days of notification of admission. Failure to do so may result in the position being assigned to an applicant on the waiting list. Such deposits are applied to the first year's fees. An applicant who accepts a position but later rescinds his/her acceptance will forfeit the \$100 deposit.

All medical students must commence a program of immunization before registration day. The Faculty of Medicine reserves the right to refuse admission to any candidate whose health is such as to indicate that medical studies could be prejudicial to his or her well-being.

Admission of Students by Transfer

The Faculty will consider application by students for transfer only from other LCME-accredited medical schools and only under special circumstances. Approval of transfer will be based on evaluation of the candidate and his/her past performance and on the availability of positions. Because the first and second years of the three-year MD program at the University of Calgary are regarded as a continuum of course work, transfers will only be considered in the final or clerkship year.

Administration

Faculty Administrative Officers

Dean

D.G. Gall

Vice Dean

J.H. van de Sande

Associate Dean (Clinical Affairs)

M.H. Atkinson

Associate Dean (Continuing Medical Education)

J.A. Toews

Associate Dean (Graduate Clinical Education)

J.D. Nation

Associate Dean (Research)

C.R. Triggler

Associate Dean (Undergraduate Medical Education)

A.R. Jones

Associate Dean (Graduate Sciences Education)

R.B. Hawkes

Associate Dean (International Health)

T. Jadavji

Assistant Dean (Undergraduate Medical Education)

J.-G. DesCôteaux

Assistant Dean (Undergraduate Science Education)

B. Hallgrímsson

Assistant Dean (Research)

N. Wong

Executive Director

P. Heinrich

For more information, please consult the 2003/2004 Faculty of Medicine calendar, or visit the Faculty of Medicine Calendar website at: www.ucalgary.ca/pubs/calendar/current/What/Fac/MD/index.htm

