

MEMORIAL UNIVERSITY OF NEWFOUNDLAND

SENATE

The regular meeting of Senate was held on Tuesday, February 14, 1995, at 8:00 p.m. in Room E5004.

33. PRESENT

The President, Dr. J. Tuinman, Dr. K. Bindon, Dean W. Blake, Mr. G. Collins, Dr. G. Duncan, Mr. R. Ellis, Dean A. Law, Dean T. Murphy, Mr. L. O'Reilly, Dean T. Piper, Dr. W. Redden, Dr. E. Moore (for Dean R. Seshadri), Acting Dean C. Sharpe, Ms. D. Whalen (for Dean G. Skanes), Dr. M. Volk, Dr. G. Bassler, Dr. J. Bradley, Mr. E. Brown, Dr. J. Buffinga, Dr. G. Clark, Dr. W. Davidson, Professor S. Findlay, Dr. J. Gale, Dr. G. Gardner, Dr. R. Gordon, Dr. G. Gunther, Dr. M. Haddara, Professor K. Hestekin, Dr. G. Kealey, Dr. A. Kozma, Dr. W. Locke, Dr. R. Lucas, Capt. W. Norman, Dr. P. Nosko, Dr. R. Payne, Dr. R. Pickavance, Dr. N. Rich, Dr. R. Rompkey, Dr. G. Sabin, Dr. D. Treslan, Dr. C. Turner, Professor Y. Walton, Dr. M. Wernerheim, Dr. H. Williams, Dr. M. Withey, Mr. C. Mercer, Mr. S. Cloutier, Mr. D. Baker, Mr. S. Barter, Mr. D. Hynes, Mr. D. Gallant, Mr. B. McCartney, Ms. W. Stimson.

Mr. J. Connors and Dr. H. Miller attended by invitation to answer any questions regarding the proposed new Bachelor of Maritime Studies degree programme.

The President welcomed the two newly elected Senators from the Marine Institute, Captain W. Norman and Mr. E. Brown.

34. APOLOGIES FOR ABSENCE

Dr. J. Crosbie, Dean W. Ludlow, Dr. C. Harley, Dr. O. Janzen, Dr. J. Kennedy, Dr. T. Patel, Mr. R. King.

35. MINUTES

The minutes of the regular meeting of Senate held January 10, 1995, were taken as read and confirmed.

36. STUDENT APPEAL TO SENATE

MUN NO. 8324006

Following the normal appeals process, this student's appeal that she be granted admission to the Bachelor of Special Education Degree Programme, was denied by the Executive Committee of Senate at a meeting held on December 22, 1994. The student subsequently requested that her appeal be heard by Senate.

Following consideration, it was moved by Dr. Clark, seconded by Dr. Gardner and carried that this student's

appeal be DENIED.

37. *REPORT OF THE EXECUTIVE COMMITTEE OF SENATE

It was agreed by separate motion where necessary, that the report of the Executive Committee be approved as follows:

*Report of the Senate Committee on Undergraduate Studies

It was agreed that the following undergraduate calendar changes be approved or received for information as appropriate:

37.1 Faculty of Business Administration

Page 334, 1994-95 Calendar, following the heading General Notes, renumber and amend clauses 3 and 4 as new number 3 to read as follows:

"3. The Committee on Undergraduate Studies, Faculty of Business Administration, may recommend that transfer credit for certain Business courses be awarded on the basis of successful completion of professional courses that lead to a professional designation (e.g. C.A., C.G.A., C.M.A.). Applications for transfer credit should be made through the Office of the Registrar."

Re-number clause 5 as 4 and amend to read as follows:

"The Faculty of Business Administration may approve that credit for certain Business courses successfully completed through Memorial University's former Extension Services Division be granted upon application to the Registrar for transfer credit evaluation."

Following the heading Regulations for the General Degree of Bachelor of Commerce (Co-operative), Admission, amend clause 1 to read as follows:

"1. Students should note...programme is March 1. For all other ...Spring Semester."

Delete clauses 8 and 10.

Renumber current clause 9 as 8 and amend to read as follows:

"8. Students may apply for admission for Advanced Standing up to and including Term IV. Students applying for admission to a term beyond Term I must have completed all of the courses required in the programme up to that term, including the courses required for admission to the programme."

Renumber current clause 11 as 9.

Page 335, following the heading The Curriculum, amend the final paragraph of clause 3. to read as follows:

"Unspecified credits may not be used to fulfil the requirements outlined in a, b, c, d, and g. above".

(Amendments to the list of course requirements a) to h) were amended by Senate at the meeting held on January 10, 1995.)

Following the heading Examination and Advancement, delete the second and third sentences of clause 1 and replace with the following:

"In addition, the standing of every student will be assessed by the Committee on Undergraduate Studies in accordance with the promotion requirements outlined in Clauses 2 and 8 below."

Amend clause 3 by replacing the phrase "in the opinion of the Dean" with the following:

"in the opinion of the Admissions Committee".

Page 340, following the heading Regulations for the Diploma in Business Administration, add the following sentence to clause 4:

"However, such exemptions may not be used to reduce the number of credits required for the Diploma."

Following the heading Regulations for the General Degree of Bachelor of Commerce, add the following sentence to clause 3:

"However, such exemptions may not be used to reduce the number of credits required for the Degree."

Page 336, delete the entry, Students Planning Graduate Studies in its entirety.

37.2 Department of French and Spanish

Page 130, 1994-95 Calendar, delete French 2161.

Re-number French 1060 as French 2159 and replace the note with the following:

"Note: Students may not receive credit for both French 2159 and the former French 1060, or for French 2100 or 2101."

For French Version see Calendar

Following course description for French 2160 amend note to read as follows:

"Note: Students may not receive credit for both French 2160 and French 2100 or 2101."

For French Version see Calendar

Page 128 following the heading French Major Programme,
amend clause a) to read as follows:

"a) Language: 1050, 1051, 2100, 2101, 3700, 3701, 4700 and
4701; or 2159, 2160, 3700, 3701, 4700 and 4701 (but see
note 2 below)."

Following the heading French Minor Programme, amend first
sentence to read as follows:

"A Minor consists of at least eight courses in French and
must include French 3700."

Page 129, following the heading Course List, amend note 4
to read as follows:

"French 2159 and 2160 are courses designed for former
French immersion students as well as others with
exceptional backgrounds in French, and are intended as a
replacement for the 1050, 1051, 2100, 2101 sequence."

Amend note 7 to read as follows:

"Students who have successfully...French 1001, 1050, 1051,
the former 1060, 2100, 2101, 2159, 2160, the former 2161,
3700, 3701, 4700, 4701, 4750."

Amend note 8 by replacing the phrase "must have completed
at least French 2161 or 3701" with the following:

"must have completed at least French 3701."

Page 131, following the course description French 3700
delete the note and amend the prerequisite to read as
follows:

English version:
"Prerequisite: French 2101 or 2160."

For French Version see Calendar

Following the course description French 3701 delete the
note and amend the prerequisite to read as follows:

English version:
"Prerequisite: French 2101 or 2160."

For French Version see Calendar

Page 130, following the course description for French 3310
amend the prerequisite in the English version to read as
follows:

"Prerequisite: French 2300 or both Linguistics 2104 and
either French 2100 or 2159."

Add the following prerequisite in the French version to read as follows:

For French Version see Calendar

Page 145, following the course description Linguistics 3310 amend the prerequisite of the English and French versions to read as follows:

"Prerequisite: French 2300 or both Linguistics 2104 and either French 2100 or 2159."

For French Version see Calendar

Page 130, following the course description French 3311 amend the prerequisite to read as follows:

"Prerequisite: A Linguistics course or French 2100 or 2159."

For French Version see Calendar

Page 145, following the course description Linguistics 3311 amend the prerequisite of the English and French versions to read as follows:

"Prerequisite: A Linguistics course or French 2100 or 2159."

For French Version see Calendar

Page 131, following the course descriptions for French 3506, 3650, 3651, and 3652 amend the prerequisites to read as follows:

"Prerequisite: French 2159, or any two other courses at the 2000 level."

For French Version see Calendar

Following the course description French 2550 replace the number 1060 in the prerequisite with the following:

"2159"

Page 132, following the course description French 4301 amend the prerequisite to read as follows:

"Prerequisite: French 3701."

For French Version see Calendar

Page 133, following the course description French 4700 amend the prerequisite to read as follows:

"Prerequisite: French 3701."

For French Version see Calendar

37.3 Department of Biology

New courses

4510. Distribution Patterns in the Sea. An ecological approach to the description and understanding of biogeographic patterns in the sea. Lectures and discussions will focus on what the main patterns are and how they are determined, aspects of the ocean environment that contribute to pattern, how lifestyles are adapted to oceanic conditions, diversity and dispersal, analytical techniques, and practical geographic problems concerning the exploitation and management of marine resources. Three hours of lecture/seminar and a three hour laboratory/discussion session each week.
Prerequisites: Biology 3710, 3711, 4505, 4605.

3170. Wildlife Management. (same as Geography 3170). This course is taught and administered by the Department of Geography.
Prerequisites: Biology 2600, Statistics 2500 or 2510 or Geography 2220.

Page 190, amend course description of Biology 2120 to read as follows:

"2120. Biology for Students of Earth and Food Sciences. An introduction of the principles of Biology for students in Earth Sciences and Food Science. Topics will include principles of classification, levels of biological organization, fundamental characteristics of living organisms and basic concepts in ecology. Three hours of lecture and three hours of laboratory per week.
Prerequisites: Earth Science majors; Earth Sciences 1001 or permission of the Head of Department.
Food Science majors: no prerequisites.
Note (1). Entry to this course is restricted to Earth Sciences majors and Food Science majors, or by permission of the Head of Department.
Note (2). This course may not be used for credit by Biology Majors or Minors.
Note (3). Credit may not be obtained for both Biology 2120 and either of Biology 1001 or 1002."

Following the heading Course List replace Note as Note 1 and add new Note 2 as follows:

"Note 2: Food Science majors may use Biology 2120 in place of Biology 1001-1002 as prerequisite to higher level Biology courses."

37.4 Abolition of the Ten Subject Areas Limitation

Page 179, 1994-95 Calendar, following the heading Regulations for the General Degree of Bachelor of Science delete the phrase "nor more than ten" from clause 3(ii).

Page 180, following the heading Regulations for the Honours Degree of Bachelor of Science, Course Requirements delete the phrase "nor more than ten" from clause 2c)ii.

37.5 Department of Biochemistry

Page 186, 1994-95 Calendar, following the heading Nutrition Programme General Degree in Nutrition delete clauses a) through k) and replace with the following:

- "a) Biochemistry 2000, 2001, 2020, 3100, 3102, 311A, 311B, 3200, 3201, 3401, 3402, 4300, 4301, 4302, 4502.
- b) Biology 1001, 1002, 3050.
- c) Chemistry 1000, 1001, 240A, 240B.
- d) Computer Science 1700 or 2602.
- e) Two courses in first-year English.
- f) Mathematics 1080 and 1081 (or Mathematics 1000).
- g) Physics 1200 and 1201 (or 1050 and 1052).
- h) Statistics 2500 or 2510 or Psychology 2900."

Add a final paragraph to read as follows:

"Students are encouraged to choose a minor in the subject of their choice."

Following the heading Nutrition Programme, Minor in Nutrition amend the first paragraph to read as follows:

"Students who take a minor in Nutrition will complete:

- (a) Biochemistry 2020, 3100, 3102, 311A, 311B, 3200, 3201
- (b) one of Biochemistry 4300, 4301, 4302."

Following the heading Professional Programme in Dietetics insert a new subheading and section after Admission to Dietetics section to read as follows:

"Registration and Promotion

The following regulations apply to the programme courses taken at Memorial University.

Biochemistry and Chemistry courses shall be taken in the programme year indicated by the course number. Biology 1001 and 1002 must be completed by the end of the second year of the programme. The remaining courses are to be scheduled so that the course load is five in each semester. Exceptions to this prescribed programme, including specified course load, must have the approval of the Committee on Undergraduate Studies of the department. Students who have completed programme courses in advance of admission to the programme may arrange with the Committee

a reduction in the required course load.

For promotion from each term the requirements are: the achievement of a passing grade in all courses; an overall average of at least 60% in those courses required in each academic term; and completion of the appropriate course load as outlined above.

Students who fail to achieve the standards outlined in the paragraph above will be required to withdraw from the programme. They may be considered for re-admission at which time they will normally be required to repeat the courses in which they failed, and/or to repeat courses which will raise the average to 60%, unless, in the opinion of the Head, a more meaningful course of study would be appropriate.

In order to be considered for re-admission, students must formally apply for re-admission to the programme not later than the deadline date specified in the first paragraph of the Admission section of this programme."

Page 187, following the course description for Biochemistry 2430 delete the phrase Laboratory: Three hours per week and replace with the following:

"Tutorial: One three-hour case study tutorial on alternate weeks."

37.6 School of Physical Education and Athletics

Page 249, 1994-95 Calendar, following the heading General Comments add new paragraph at end of section to read as follows:

"Courses Available to Non-BPE Students

Students not registered in a BPE program may register for three PHSD courses from the following list, if space is available and with instructor approval. A maximum of two additional courses from this list may be allowed by written permission of the Undergraduate Studies Committee of the School.

- PHSD 2310 Human Anatomy
- 2320 Primary Human Physiology
- 2410 Historical and Comparative Physical Education
- 3310 Physiology of Exercise
- 3330 Health Issues I
- 3350 Health Issues II
- 3410 Sociology of Sport
- 3520 Physical Recreation
- 4510 Social Recreation
- 4520 Recreation and the Newfoundland Community

Page 250, following the heading Regulations for the Degree of Bachelor of Physical Education delete the important

notice section in its entirety and replace with new section to read as follows:

SUMMARY OF ADMISSION REQUIREMENTS:

- 10 course credits as specified
- FITNESS TEST completed within the three months prior to the application deadline
- SWIM TEST completed within two years prior to the application deadline
- FIRST AID CERTIFICATE (current)
- APPLICATION FORM AND HEALTH CARD (obtain from Office of Registrar)
- * If applying from outside St. John's, call the School's General Office at (709) 737-8130 to contact the FITNESS & SWIM TEST COORDINATORS to arrange for testing.

The above items should all be submitted by APRIL 1 for September admission.

Following the heading Programme of Study, clause 3 delete the following phrase in the final paragraph:

", through the Division of Co-operative Education".

Page 251, following the heading Evaluation and Promotion, clause 1 delete the phrase "by the Registrar" and replace with the following:

"by mail and will be forwarded to the Registrar."

Following the heading Evaluation and Promotion, clause 2 delete the word "Registrar" and replace with the following:

"Academic Council".

Page 252 following the heading Professional Course Descriptions insert "(R)" after the course numbers 3520, 3550, 3560, 4510, 4520, 4530, 4540, 4550, 4560 and 4570.

Following the heading Course List add new note as follows:

"Note: (R) - following course number indicates Recreation Courses."

37.7 Department of English

age 124, 1994-95 Calendar, amend prerequisites of English 4210 and 4211 to read as follows:

"Prerequisites: English 3200 or 3201."

Pages 120-121, following the heading English Language and Literature amend the first sentence of clause 5 to read as follows:

"Students who choose English as their Minor must complete at least eight courses in the subject. These must include one of English 2000, 2005, or 2110, and at least two courses having an initial digit "3", one of which must be English 3200 or 3201. Requirements for the Minor may not be satisfied by the completion of courses listed in Clause 8 below, nor by courses conducted by another Department."

Revised titles and course descriptions.

3160. Post-Colonial Literature I. A study of selected authors of Australia and New Zealand.

3161. Post-Colonial Literature II. A study of selected authors of the West Indies, Africa and the Indian sub-continent.

3813. Film Studies. An introduction to the study of narrative feature film with an emphasis on the history of the industry, the evolution of different genres, the influence of national cinemas and the role of major directors in the development of the medium.

Amend numbers and course descriptions of English 400A and 400B to read as follows:

"4000. English Literature and History of Ideas I. A study of European thought and culture as they affect the history and development of English literature from the Middle Ages to the eighteenth century.

Note: This course may not be taken for credit by students who have completed English 400A and B.

4001. English Literature and the History of Ideas II. A study of European thought and culture as they affect the history and development of English literature from the eighteenth century to the present.

Note: This course may not be taken for credits by students who have completed English 400A and B."

Revised course descriptions.

4500. Old English Language and Literature I. A study of representative Old English prose in its cultural and linguistic contexts.

Note: Students are advised to take English 250A and B before taking this course.

4501. Old English Language and Literature II. A study of representative Old English poetry in its cultural and linguistic contexts.

Note: Students are advised to take English 250A and B

before taking this course.

4600. Middle English Language and Literature I. A study of such representative writers as Chaucer, Gower, Langland and the Gawain/Pearl poet.

4601. Middle English Language and Literature II. A study of representative genres of the period 1150-1450, such as romance, lyric, and devotional writing.

2000. Major Writers to 1800. An introduction to the work of major authors by detailed study of selected texts. There is an emphasis on the various skills of essay writing.

Note: Students can receive credit for only one of English 2000, 2005, and 2110.

2001. Major Writers from 1800. An introduction to the work of major authors by detailed study of selected texts. There is an emphasis on the various skills of essay writing.

Note: Students can receive credit for only one of English 2001, 2007, and 2111.

2111. Survey of English Literature II. A study of the development of English prose, poetry and drama in their social and literary contexts, through the analysis of works representing the development of literature from the mid-eighteenth century through the twentieth century.

Prerequisite: A minimum average grade of 65% in required first-year courses in English, or permission of the Head of Department.

Notes: 1) Students can receive credit for only one of English 2001, 2007, and 2111.

2) Students are urged to take English 2110 before 2111.

2150. Modern Canadian Fiction. A study of representative Canadian fiction since 1930, including such authors as Ross, Buckler, Davies, Laurence, Atwood, Ondaatje and Findley.

2210. The English Novel to 1800. A study of representative eighteenth-century English novels including such authors as Aphra Behn, Defoe, Richardson, Fielding, Sterne and Smollett.

Note: This course may not be taken for credit by students who have completed English 2200.

2211. The English Novel from 1800-1900. A study of representative English novels of the nineteenth century including works by such authors as Austen, the Brontës, Dickens, Thackeray, Gaskell, Eliot, Trollope and Hardy.

Note: This course may not be taken for credit by students who have completed English 2200.

2212. The Twentieth-Century British Novel. A study of representative British novels of the twentieth century,

including works by such authors as Conrad, Forster, Joyce, Lawrence, Woolf, Waugh, Lessing and Murdoch.

Note: This course may not be taken for credit by students who have completed English 2201.

2213. The Twentieth-Century American Novel. A study of representative American novels of the twentieth century, including such authors as James, Dreiser, Fitzgerald, Hemingway, Faulkner, Hurston, Morrison, Pynchon, DeLillo and Silko.

Note: This course may not be taken for credit by students who have completed English 2201.

2214. Nineteenth-Century American Fiction. A study of representative American fiction of the nineteenth century including works by such authors as Poe, Hawthorne, Melville, Stowe, Twain and Chopin.

Note: Student can receive credit for only one of English 2214 and 2215.

250A and 250B. Introduction to Old English. In the first semester, a study of the basic phonology, morphology and syntax of Old English. In the second semester, the reading of prose and poetry.

2600. Introduction to Middle English. A study of the language and literature of the later medieval period, excluding Chaucer.

2601. Introduction to Early Middle English. A study of the language and literature of the earlier medieval period.

3001. Satire. A study of satire from classical times, examining major forms of satiric expression such as the monologue, the parody and the long narrative.

3021. English Drama to 1580. A study of the development of English drama from the Middle Ages to 1580. The course may also consider the popular arts, such as folk plays and mumming.

3100. Practical Criticism. A study of poetry through close reading and analysis to reveal meaning, methods, tone and technique.

3120. Tragedy. The course explores the idea of tragedy through a number of works from Classical to recent times.

3121. Comedy. The course explores the idea of comedy through a number of representative works.

Note: This course may not be taken for credit by students who have completed English 3000.

3152. Canadian Literature to 1918. A study of the development of Canadian literature from its beginnings to the end of World War I.

Note: This course may not be taken for credit by students

who have completed English 3145, 3147, or 3150.

3153. Canadian Literature, 1918-1945. A study of the development of modern Canadian literature, covering the period from the end of World War I to 1945.

Note: This course may not be taken for credit by students who have completed English 3145, 3147, or 3150.

3157. Canadian Literature 1945-1970. A study of the development of Canadian literature from 1945 to 1970.

Note: This course may not be taken for credit by students who have completed English 3146, 3148, 3151, or 3154.

3158. Canadian Literature 1970 to the Present. A study of recent developments in Canadian literature.

Note: This course may not be taken for credit by students who have completed English 3146, 3148, 3151, or 3154.

3302. Nineteenth-Century Drama. A study of both literary and theatrical dimensions of nineteenth-century drama, such as melodrama, comedy, farce, pantomime, burlesque, extravaganza, spectacular entertainment, naturalism and the well-made play.

3600. Chaucer. A study of representative poems.

3650. Structure of Modern English: Phonology and Morphology. A study of standard English pronunciation and regional variations; stress, intonation, juncture; inflectional and derivational morphology. Informal speech and written English are compared.

3651. Structure of Modern English: Syntax. A study of the syntax of modern English, including classes of words, the structure of phrases, clauses and sentences, variation in clauses and sentences and the principles of discourse analysis.

Prerequisite: English 2390 or Linguistics 2103.

Amend "3810-3820" to read as follows:

"3811-3820 (excluding 3813 and 3817). Special Topics."

Revised course descriptions

4010. Literature, 1485-1600: Prose and Poetry. A study of the literature of the English Renaissance, including Tudor humanism, Elizabethan prose fiction, and such writers as Wyatt, Surrey, Sidney and Spenser.

4030. British Literature, 1600-1660. A study of selected works by such authors as Bacon, Donne, Jonson, Overbury, Browne, Herbert, Burton, Walton, Vaughan and the Cavalier poets.

Amend course description and delete note of English 4031 to read as follows:

"4031. British Literature 1660-1700. A study of selected works by such authors as Milton, Marvel, Clarendon, Bunyan, Evelyn, Pepys, Behn and Dryden."

Amend course description of English 4070 to read as follows:

"4070. British Literature, 1890-1920. A study of representative writers such as Hardy, Wilde, Conrad, Housman, Forster, Edward Thomas, Owen, D. H. Lawrence, Mansfield and Woolf."

Amend course description and delete note of English 4071 to read as follows:

"4071. British Literature, 1920-1945. A study of representative writers such as Virginia Woolf, Eliot, Bowen, Orwell, Graham Greene, Auden, Empson, Waugh and Dylan Thomas."

Revised course descriptions

4080. British Literature since 1945. A study of representative writers of the period, such as Larkin, Murdoch, Hughes, Jennings, Geoffrey Hill, Powell, Pinter, Kingsley Amis and Ishiguro.

4100. Critical Theory I. A survey of critical approaches to literature, from Plato to the end of the nineteenth century.

Note: Students are advised to take this course towards the end of their program.

4101. Critical Theory II. A survey of critical approaches to literature in the twentieth century.

Note: Students can receive credit for only one English 4101 and 4105. Students are advised to take this course towards the end of their program.

4251. American Literature to 1880. Representative fiction, prose and poetry, including works by such authors as Edwards, Cooper, Hawthorne, Melville, Thoreau, Emerson, Poe, Whitman and Dickinson.

4270. American Literature Since 1945. A study of representative writers of the period, such as Stevens, Lowell, Wilbur, Plath, McCullers, Bellow, Malamud.

Note: Students can receive credit for only three of English 3215, 4260, 4261, and 4270.

4805. Blake. A study of a selection of Blake's major writings.

4821. Canadian Literature in Context I. A study of some of the main concepts in Canadian culture up to World War II as they affect the history and development of Canadian

literature.

Prerequisite: A course at the 2000 or 3000 level in Canadian literature, or permission of the instructor.

Note: This course may not be taken for credit by students who have completed English 4820.

4822. Canadian Literature in Context II. A study of some of the main concepts in Canadian culture since the World War II as they affect the history and development of Canadian literature.

Prerequisite: A course at the 2000 or 3000 level in Canadian literature, or permission of the instructor.

Note: This course may not be taken for credit by students who have completed English 4820.

37.8 Medieval Studies Programme

Page 147, 1994-95 Calendar, following the heading Regulations: Majors, amend clause 2 to read as follows:

"2) Two of MST 3000, 3001, and 3002, or one of MST 3000, 3001, and 3002 and one of MST 3350-3360."

Amend clause 3 to read as follows:

"3) Two courses at the 4000 level from either MST 4000-4020 or List A."

Amend clause 5 to read as follows:

"5) Four further courses from List A below normally to include at least two at the 3000 level or above. Additional courses may be chosen in consultation with the Programme Supervisor."

Following the heading Regulations: Minors, amend clause 2 to read as follows:

"2) Two of MST 3000, 3001, and 3002, or one of MST 3000, 3001, and 3002 and one of MST 3350-3360."

Amend clause 3 to read as follows:

"3) One course at the 4000 level from either MST 4000-4020 or List A."

Amend clause 4 to read as follows:

"4) Three further courses from List A below, normally to include at least one from the 3000 level or above. Additional courses may be chosen in consultation with the Programme Supervisor."

Under the heading 3000 level courses, insert "German 3911" before History 3011-20.

37.9 Department of History

New course

3545. History of Modern Japan. An examination of the history of Japan during the nineteenth and twentieth centuries with emphasis on the period following the Second World War. This course will also trace the cultural heritage of the Japanese people.

38.10 Women's Studies Programme

Page 161, 1994-95 Calendar, delete the current course description for Women's Studies 4000 and replace with the following:

"Women's Studies 4000. Seminar in Women's Studies. An interdisciplinary seminar designed to focus on women's issues, and on theories and methodologies of women's studies.

Three hour seminar per week.

Prerequisites: Students must normally have completed Women's Studies 2000 and five other Women's Studies Programme courses before taking Women's Studies 4000. In exceptional cases, students without these prerequisites may be accepted into the course, with the approval of the Instructor of WSTD 4000 and the Programme Coordinator."

37.11 Department of Religious Studies

Page 154, 1994-95 Calendar, amend course description of Religious Studies 1010 to read as follows:

"1010. Religion in the Modern World. An introduction to some of the major issues confronting religion in the modern world. The focus will be on such topics as freedom and determinism, good and evil, love and sexuality."

Delete Religious Studies 1030 and replace with the following:

"1031. Religion, Death, and the Afterlife. This course examines the treatment of death and the afterlife in the major religions of the world."

Amend course description of Religious Studies 2810 to read as follows:

"2810. Religion and Modern Culture. An historical examination of the impact of science on religion in Western culture. Particular emphasis will be placed on such developments as the scientific revolution, the rise of modern technology, and the emergence of modern scientific theories."

Page 153, following the heading General Degree, amend clause 2 a) and b) to read as follows:

"2. Major in Religious Studies

A minimum of twelve Religious Studies courses is required. These twelve must include a total of six courses at the 3000 level or above, chosen from at least three of the following groups:

- a) Biblical Studies: 3030, 3060, 3090, 3200, 3210, 3220, 3240, 3251, 3260, 3271, 3275, 3700, 3701, 4201-4230.
- b) Christian Thought and History: 3150, 3510, 3520, 3530, 3560, 3591, 3595, 3900, 3901, 3902, 3903, 4700-4730.
- c) World Religions: 3303, 3340, 3400, 3410, 3420, 3430, 4300-4330.
- d) Religion, Ethics, and Modern Culture: 3500, 3640, 3650, 3660, 3670, 3810, 3820, 3830, 3840, 4800-4830."

Delete the phrase "(B.A. or B.A./B.Ed)" from clause 3.

Amend clause 4 to read as follows:

"4. Concentration in Religious Studies (B.Ed., Primary or Elementary)

A minimum of six to a maximum of nine courses is required, including:

Religious Studies 2013 or 2130 or 2140.

Religious Studies 2050 and 2051.

Two courses at the 3000 level.

At least one course to be chosen from 2011, 2012, 2130, 2140, 2610, 2810, or an additional 3000-level course."

Amend clause 1 by replacing the phrase "for a major, minor or concentration" with the following:

"for a major or minor" .

Amend clause 1 by replacing the number 1030 with the following:

"1031".

37.12 Department of Philosophy

Unless otherwise indicated changes are to be made to both St. John's and Sir Wilfred Grenfell College sections of the Calendar.

Page 149, 1994-95 Calendar, following the heading Course List, delete Philosophy 1000. (St. John's only)

Delete Philosophy 1003. (St. John's only)

Amend course description of Philosophy 1001 to read as follows:

"1001. Philosophy of Human Nature. An approach to philosophical thinking by way of analysis and critique of theories of human nature, classical and modern, and the world views associated with them."

New course

2702. History of Modern Philosophy. A survey of the development of western Philosophy since the 17th century. Note: Credit may be obtained for only ONE of 3700, 3701, 2702.

Delete Philosophy 3090. (St. John's only)

Delete Philosophy 3701.

Revised course descriptions

3160. Philosophy of the Human Sciences. Methodological foundations of psychology, cognitive science and the social sciences. Philosophical presuppositions and implications of these approaches to human nature will be examined.

3600. Philosophy of the Humanities. Expression and interpretation in the humanistic disciplines: theology, history, art and literature, language. Philosophical Hermeneutics.

3760. Medieval Philosophy: Developments in Philosophy from Augustine to Ockham. (St. John's only)

3790. Late Medieval and Renaissance Philosophy. Philosophical writings of the 14th-16th centuries. (St. John's only)

3820. Rationalism. a study of rationalism in Descartes, Spinoza, Leibniz and subsequent developments of this standpoint. (St. John's only)

3830. Empiricism. A study of classical empiricism in the works of Locke, Berkeley and Hume and of later developments of this philosophical standpoint. (St. John's only)

New course

3840. Hume. A study of the work and influence of Hume on theories of knowledge, metaphysics and moral philosophy.

Revised course descriptions

3870. Utilitarianism. Moral, political and jurisprudential themes in Bentham, J.S. Mill and their followers. Recent utilitarian theories. (St. John's only)

3880. Post-Idealist Thought. 19th century reactions to idealist systems, the critique of Metaphysics, the rise of Positivism.

3890. Marxism. The political, social and historical theories of Marx and Engels and their later developments; themes in Marxist analysis of class and capitalism. (St. John's only)

3920. Phenomenology. An introduction to the philosophy of Husserl and some of his followers, e.g. Heidegger, Merleau-Ponty.

New course

3930. Pragmatism. The pragmatist standpoint from Peirce to the present.

Renumber and amend course description of Philosophy 3980 to read as follows:

"3940. Existentialism. The Philosophy and literature of Existentialism from Kierkegaard, Nietzsche and Dostoevsky to Sartre, de Beauvoir and Camus.

Note: Credit may not be obtained for both 3980 and 3940. (St. John's only)

New course

3950. Recent Philosophy: Topics and developments in contemporary thought, e.g. post-structuralism, post modernism, relativism, realism and anti-realism etc.

Page 148, following the heading Philosophy Programmes amend the current clause III.) 3 to read as follows:

"3. The general requirements for an Honours programme in Arts require the completion of either a Comprehensive Examination or an Honours Essay or Dissertation. In Joint Honours the student may elect to fulfill this requirement in either subject of specialization. When the student chooses to fulfill it in the Philosophy programme, the Comprehensive Examination (4998) will normally be required."

Following the heading Philosophy Programmes, Clause III) amend 1.A to read as follows:

"A. Western Thought: 1200/2200, 3500 or one of 3600, 3610, 3620, two of 2701, 2702, 3760, a major author, three others."

Amend 2 to read as follows:

"The Major...plus 2210; 2701 or 2702..."

Curriculum.

Page 87, 1994-95 Calendar, amend the note following the course description for Psychology 2025 to read as follows:

"Note: Credit may not be obtained for Psychology 2025 and either of Psychology 2010 or 2011."

Amend the note following the course description for Psychology 2125 to read as follows:

"Note: Credit may not be obtained for Psychology 2125 and either of Psychology 2100 or 2120."

Amend the note following the course description for Psychology 2225 to read as follows:

"Note: Credit may not be obtained for Psychology 2225 and either of Psychology 2240 or 2250."

Delete Psychology 2900.

New course

2925. Research Methods and Data Analysis in Psychology-I. Simple one and two-group research designs and an introduction to basic descriptive and inferential statistics. Topics to be covered will include concepts of internal and external experimental validity, simple control procedures, types of experimental variables, measures of central tendency and variability, parameter estimation, and statistical hypothesis testing. The statistical procedures described will include the t-test, measures of correlation, the chi-square test, and selected non-parametric tests. This course includes a weekly laboratory.

Prerequisites: Mathematics 1000 or any two of the following courses: Mathematics 1080, 1081, 1050, 1051.

Note: Credit may not be obtained for Psychology 2925 and any one of the following courses: Psychology 2900, Statistics 2500, Statistics 2510, the former Psychology 2510, the former Mathematics 2510.

Rename and amend course description of Psychology 2950 to read as follows:

"2950. Research Methods and Data Analysis in Psychology-II. Multiple group and factorial research designs, research issues, simple regression analysis, and an introduction to analysis of variance. Topics to be covered will include one and two-factor research designs, ethics in human and animal research, the research proposal, pilot studies, and computing in psychological research. The statistical procedures described will include univariate linear regression analysis, several analysis of variance models (one-factor between, one-factor within, two-factor between, and two-factor mixed, and multiple comparison procedures).

Prerequisite: Psychology 2925

Note: Credit may not be obtained for Psychology 2950 and Psychology 2901."

Rename and amend course description of Psychology 3950 to read as follows:

"3950. Research Methods and Data Analysis in Psychology-III. Miscellaneous research methods and an introduction to multivariate analysis. Topics to be covered will include behavioural observation, surveys, case studies, test and scale construction, clinical research, and qualitative research methods. The statistical procedures described will include: test construction statistics, analysis of variance (two-factor within, blocked designs), analysis of covariance, multivariate linear regression analysis, and discriminant analysis.

This course includes a weekly laboratory.

Prerequisite: Psychology 2950

Note: Credit may not be obtained for Psychology 3950 and Psychology 3900."

Amend prerequisites of Psychology 3525 to read as follows:

"Prerequisites: Psychology 2925 and any Survey Course in Psychology from the Sir Wilfred Grenfell College Psychology Programme."

Amend prerequisites of Psychology 3628 to read as follows:

"Prerequisites: Psychology 2950 and any one of Psychology 2025, 2125, 2425, 2625."

Amend prerequisites of Psychology 3725 to read as follows:

"Prerequisites: Psychology 2925 and Psychology 2825 or Psychology 2225."

Amend prerequisites of Psychology 3825 to read as follows:

"Prerequisites: Psychology 2925 and Psychology 2825."

Replace Psychology 2900 with Psychology 2925 wherever it appears in both the Sir Wilfred Grenfell College Psychology Programme and Cognitive Studies Programme.

37.14 School of Physical Education and Athletics

Page 253, 1994-95 Calendar, delete entries for Physical Education 2210, 2220, 3210, 3220, 4210 and 4220.

Page 254, immediately prior to the heading Work Terms, insert the following section:

"ACTIVITY COURSES

2210. Concepts, Skills and Strategies of Selected Physical

Activities. Movement concepts: the conceptual approach to teaching physical activity. Application through various forms of dance (e.g., creative, folk).
Six hours per week.

Throughout the following five courses a number of teaching methods may be employed; emphasis will be placed on the language and practice of the conceptual approach.

2220. Concepts, Skills and Strategies of Selected Physical Activities. Gymnastics and Aquatics:
Six hours per week.
Prerequisite: PHSD 2210

3210. Concepts, Skills and Strategies of Selected Physical Activities. Court Games: volleyball, tennis, badminton, plus a selection of other court games. Individual Activities: track and field, wrestling, and other combative activities.
Six hours per week.
Prerequisite: PHSD 2220.

3220. Concepts, Skills and Strategies of Selected Physical Activities. Target and Field Games: golf, archery, softball.
Outdoor Activities (Summer): canoeing, navigational skills, lightweight camping, overnight canoe trip, introduction to rock climbing.
Six hours per week.
Prerequisite: PHSD 3210

4210. Concepts, Skills and Strategies of Selected Physical Activities. Territorial Games 1: ice hockey, water polo, lacrosse.
Outdoor Activities (Winter): snow travel methods emphasizing cross-country skiing, navigational skills, winter survival/camping, overnight camping.
Six hours per week.
Prerequisite: PHSD 3220

4220. Concepts, Skills and Strategies of Selected Physical Activities. Territorial Games 2:
(Outdoor) soccer, rugby.
(Indoor) basketball, team handball.
Six hours per week.
Prerequisite: PHSD 4210"

Page 250, following the heading Programme of Study amend clause 5 to read as follows:

"Students following the Teaching...from one of the subject areas listed in the Bachelor of Education (Secondary) degree regulations."

Page 253, following course description of Physical Education 3410 delete the prerequisite.

Page 250, following the heading Programme of Study add new clause 8 to read as follows:

"8. IN ADDITION TO MEETING THE ACADEMIC REQUIREMENTS FOR GRADUATION, STUDENTS MUST SUBMIT PROOF OF A FIRST AID CERTIFICATION VALID AT THE TIME OF GRADUATION AND MUST HAVE PASSED THE FITNESS TEST DURING THE FINAL ACADEMIC SEMESTER OF THEIR PROGRAM."

37.15 Faculty of Education

Page 228, 1994-95 Calendar, following the heading Admission Requirements to the Degree and Diploma Programmes in Vocational Education amend clause 1 to read as follows:

"1. Applications for admission are considered three times per year. The deadlines for submission of applications are June 15 for admission to the Fall Semester, October 1 for admission to the Winter Semester, and January 15 for admission to the Spring Semester."

Page 230, following the heading Regulations for the Diploma Programme in Adult Teacher Education amend clause 1 to read as follows:

"Applications for admission are considered three times per year. The deadlines for submission of applications are June 15 for admission to the Fall Semester, October 1 for admission to the Winter Semester, and January 15 for admission to the Spring Semester."

Page 221, following the heading Bachelor of Education (Primary) and Bachelor of Education (Elementary), Admission amend clauses 2.b) and 2.c) to read as follows:

"2.b) Mathematics 1050 and 1051. (For students whose concentration is Mathematics, two courses applicable to that concentration are acceptable).

2.c) Science 115A and 115B; or Science 1000 (with lab) and Science 1001 (with lab); or three courses in Science, one each to be chosen from Biology, Chemistry, Earth Sciences or Physics. (For students whose concentration is Science, two courses applicable to the concentration are acceptable)."

Page 222, following the heading Regulations for the Degree of Bachelor of Education (Primary) amend clause 2.b) to read as follows:

"2.b) Science 115A and 115B; or Science 1000 (with lab) and 1001 (with lab); or three courses in Science, one each to be chosen from Biology, Chemistry, Earth Sciences or Physics; or a concentration in Science."

Page 223, following the heading Regulations for the Degree of Bachelor of Education (Elementary) amend clause 2.b) to

read as follows:

"2.b) Science 115A and 115B; or Science 1000 (with lab) and 1001 (with lab); or three courses in Science, one each to be chosen from Biology, Chemistry, Earth Sciences or Physics; or a concentration in Science."

Page 223 and 224, following headings Suggested Course Sequence - Primary Programme and Suggested Course Sequence - Elementary Programme, Years 1 and 2 amend to read as follows:

- "- Eight academic courses - First year university
- Science 115A/B (or courses as outlined in Clause 2.b)
- Mathematics 1050/1051
- Education 2040
- Education 2360
- Education 2610
- One course from Clause 2 above
- One course from Clause 3a)(ii) above
- Other academic courses"

37.16 Faculty of Business Administration

Re-number Business 5030 to Business 5600 and amend the note to read as follows:

"Note: This course was formerly Business 5030 and Business 7030. Credit may be obtained for only one of Business 5600, the former Business 7030 and the former Business 5030."

Re-number Business 6030 to Business 6600 and add the following note:

"Note: This course was formerly Business 6030. Credit may not be obtained for both Business 6600 and Business 6030."

Re-number Business 7031 to Business 6610 and amend the note to read as follows:

"Note: This course was formerly Business 7031 and Business 6009. Credit may be obtained for only one of Business 6610, the former Business 6009 and the former Business 7031."

Re-number Business 7032 to Business 7600 and add the following note:

"Note: This course was formerly Business 7032. Credit may not be obtained for both Business 7600 and Business 7032."

37.17 Department of Biology

Page 192, following the course description of Biology 4402 add the following sentence:

"Enrolment in this course is strictly limited and priority will be given to Honours students recommended by their supervisor, other Honours students and then other Biology majors."

37.18 Department of Psychology

Page 213, following the course description of Psychology 2160 amend the note to read as follows:

"Note: Credit may not be obtained for both Psychology 2160 and either of the following: Psychology 2120, the former Psychology 2101."

Amend the note following the course description for Psychology 2240 to read as follows:

"Note: Credit may not be obtained for both Psychology 2240 and any of the following: Psychology 2250, Psychology 2225, the former Psychology 2400, the former 3150."

Amend the note following the course description for Psychology 2900 to read as follows:

"Note: Credit may not be obtained for both Psychology 2900 and any of the following: Psychology 2925, Statistics 2500, Statistics 2510, the former Psychology 2510, the former Mathematics 2510."

Amend the note following the course description for Psychology 2901 to read as follows:

"Note: Credit may not be obtained for both Psychology 2901 and any of the following: Psychology 2950, Statistics 2501, Statistics 2511, the former Psychology 2511, the former Mathematics 2501, the former Mathematics 2511."

Amend the note following the course description for Psychology 3050 to read as follows:

"Note: Credit may not be obtained for both Psychology 3050 and Psychology 2010."

Amend the note following the course description for Psychology 3100 to read as follows:

"Note: Credit may not be obtained for both Psychology 3100 and Psychology 2100."

Amend the note following the course description for Psychology 3900 to read as follows:

"Note: Credit may not be obtained for both Psychology 3900 and any of the following: Psychology 3950, Statistics 3520, the former Psychology 3520."

37.19 Department of Mathematics and Statistics

Page 205, 1994-95 Calendar, amend title and course description of Applied Mathematics 4131 to read as follows:

"4131. Numerical Linear Algebra. Direct methods for solving linear systems, iterative techniques in matrix algebra, numerical solution of systems of nonlinear equations.

Prerequisite: AM 3132."

New course

4162. Numerical Methods for Partial Differential Equations. Finite differences, finite elements, discretization schemes, stability analysis. Application to parabolic, elliptic and hyperbolic problems.

Prerequisite: AM 3132, AM 4160.

37.20 Departments of Biochemistry and Physics Proposal for Supplementary Examinations

Page 179, 1994-95 Calendar, immediately preceding Regulations for the General Degree of Bachelor of Science, add the following:

"REGULATIONS TO GOVERN SUPPLEMENTARY EXAMINATIONS IN THE DEPARTMENTS OF BIOCHEMISTRY AND PHYSICS

1. Supplementary examinations will be allowed in certain of the Biochemistry and Physics courses which have written final examinations. In each course, students will be informed as to the possibility of a supplementary examination during the first week of classes. This information will be provided in writing, as part of the evaluation scheme for the course.
2. Supplementary examinations will be similar in length and degree of difficulty as the original final examination.
3. Students who wish to write supplementary examinations must apply in writing to the department within one week of release of grades.
4. A student who has clear or conditional standing may write a supplementary examination in a course if the final grade obtained is 45F and if his or her term mark is at least 50%.
5. In order to pass the course, the student, must pass the supplementary examination. If the student passes the supplementary examination, then a new grade will be calculated using the same weighting scheme as used in the course, but with the result of the supplementary examination replacing that of the original final examination. Any additional course

requirements, including a requirement to pass the laboratory component of a course, will continue to apply.

6. If the new course grade is higher than the original, it will replace the original grade on the student's transcript, subject to the condition that the final mark will not exceed the student's term mark. The student's transcript will indicate that the course result was earned as the result of a supplementary examination.
7. Supplementary examinations will be written no later than the first week of the semester immediately following the one in which the course was failed. Normally they will coincide with the writing of deferred examinations. Grades for supplementary examinations will be submitted to the Registrar's office within one week following the commencement of classes for that semester.
8. A student may write a supplementary examination for any one registration in a course only once; if the course result following the supplementary examination is a fail then the course must be repeated in order to obtain credit."

Page 185, at the end of the section entitled Programmes add the following Note:

"Note: Supplementary examinations will be allowed in certain Biochemistry courses which have written final examinations. Students should refer to the Faculty of Science Degree Regulations for details."

Page 208, following the heading Programmes in Physics add a new Note 9) as follows:

"Supplementary examinations will be allowed in certain Physics courses which have written final examinations. Students should refer to the Faculty of Science Degree regulations for details."

37.21 Department of Earth Sciences

Page 198, 1994-95 Calendar, add the following after Programmes in Earth Sciences but before Minor in Earth Sciences:

"ENTRANCE REQUIREMENTS

In order to be formally admitted to major programmes in Earth Sciences, students must have successfully completed one first-year course in each of the following departments: English, Mathematics, Earth Sciences, Chemistry and Physics; these courses must be selected from the list of required courses for degree programmes in Earth Sciences.

Students are encouraged to declare their major in their first year of study at the University.

Most of the 2000-level Earth Sciences courses that are required for major and minor programmes in Earth Sciences have Physics and Chemistry prerequisites, and students are advised to complete these prerequisites in their first year of study."

Following the heading General B.Sc. Degree in Earth Sciences (Geology) amend clause b) to read as follows:

"b) Earth Sciences 2030, 2031, 2310, 2400, 2502, 2503, 3053, 3400, 3701; at least three of Earth Sciences 3170, 3172, 3210, 3600, 3611 and 3811; at least one of Earth Sciences 4901, 4902 and 4903."

Page 199, following the heading General B.Sc. Degree in Earth Sciences (Geophysics) amend clause b) to read as follows:

"b) Earth Sciences 2030, 2031, 2310, 2400, 2502, 2503, 3053, 3161, 3170, 3172, 3400, 3701; at least one of Earth Sciences 4901, 4902 and 4903."

Page 198, following the heading General B.Sc. Degree in Earth Sciences (Geology), note 2 delete the phrase "particularly 4902 and 4903".

37.22 Department of Physics

Page 208, following the heading Minor in Physics amend the paragraph to read as follows:

"A minor in Physics will consist of eight Physics courses to include Physics 1050, 1052 (or 1200, 1201, 2050), 2053, 2054, 2055, 2056. For those students whose major is Chemistry, the eight Physics courses will not include P2053."

37.23 Department of Psychology

Page 211, 1994-95 Calendar, following the heading Requirements for a Major in Psychology delete the section and replace with the following:

"REQUIREMENTS FOR A MAJOR IN PSYCHOLOGY

1. Students may Major in Psychology as part of either a B.A. or a B.Sc. programme. All Majors are required to complete a minimum of fourteen Psychology courses as listed below.

a. Psychology 1000, 1001, 2900, 2901, 4910

b. Six laboratory courses chosen from six different areas from the following:

Development: 3050 or 3051
Social: 2160 or 3100
Learning: 2250
Perception: 2360
Cognition: 2450 or 3450
Personality & Abnormal: 2620 or 3650
Physiological: 2850 or 3800
Animal Behaviour: 3750 or 4701

c. One selected topics or 4000-level course chosen from the following: 4050, 4051, 4150, 4151, 4152, 4250, 4251, 4350, 4351, 4400, 4401, 4610, 4620, 4650, 4651, 4750, 4751, 4810, 4850, 4851, 4900, 4901.

d. Two other Psychology courses at the 3000 or 4000 level.

2. Psychology Majors following the B.Sc. programme are also required to complete the following:

a. Mathematics 1000, or 1080 and 1081

b. Biology 1001 and 1002

c. Either Chemistry 1000 and 1001 or equivalents; OR
Physics 1200 or 1050 and 1201 or 1052

d. One course in Computer Science, and

e. Two laboratory courses at the 2000 level or above in one of Biology, Chemistry, or Physics

Note: Biology/Psychology 3750 and Biology/Psychology 4701 cannot be used to satisfy the requirement of two laboratory courses at the 2000 level or above in either Biology, Chemistry, or Physics.

3. Psychology Majors following the B.A. programme are also required to complete Mathematics 1000 or two of 1080, 1081, 1050, 1051, and are encouraged to complete at least two courses in Biology and one in Computer Science."

Page 212, following the heading Requirements for Honours in Psychology delete the section and replace with the following:

"REQUIREMENTS FOR HONOURS IN PSYCHOLOGY

1. Students considering graduate studies in Psychology or who simply wish to concentrate their studies in Psychology are encouraged to enroll in the Honours programme.

2. Honours students in Psychology are required to complete the twenty Psychology courses listed below:

a. Psychology 1000, 1001, 2900, 2901, 3900, 4910, 499A, 499B

- b. Eight laboratory courses chosen from eight different areas from those listed in Clause 1(b) of the requirements for a Major in Psychology.
 - c. Three selected topics or 4000-level courses chosen from those listed in Clause 1(c) of the requirements for a Major in Psychology.
 - d. One other Psychology course at the 3000 or 4000 level.
3. Honours students must also complete the requirements listed in either Clause 2 or Clause 3, as applicable, of the requirements for a Major in Psychology.
4. Honours students will be required to submit in their graduating year, an undergraduate thesis (Psychology 499A/B) which demonstrates their competence in Experimental Psychology.
5. The attention of prospective Honours students is directed to the Joint Honours programme in Biology and Psychology, which may yield better preparation for graduate work in some areas than the Honours programme in Psychology alone.

Note: Students for the degree of Bachelor of Arts (Honours) may apply through the Head of the Department of Psychology for a waiver of clause 3 (c) of the Regulations for the Honours Degree of Bachelor of Arts.

Page 213, delete the entry, Requirements for a Minor in its entirety and replace with the following:

"REQUIREMENTS FOR A MINOR IN PSYCHOLOGY

Students who Minor in Psychology are required to complete a minimum of eight courses as follows:

- a. Psychology 1000, 1001, 2900
- b. Two laboratory courses chosen from two different areas from those listed in Clause 1(b) of the requirements for a Major in Psychology.
- c. Three other Psychology courses of which at least one must be at the 4000 level."

Page 214, following the course description of Psychology 2900 amend the prerequisites to read as follows:

"Prerequisites: Psychology 1000 and 1001; Mathematics 1000 or two of 1080, 1081, 1050, 1051."

Page 215, following the course description of Psychology 3533 amend the prerequisites to read as follows:

"Prerequisites: Psychology 1000 and 1001."

Following the course description of Psychology 4910 amend the prerequisites to read as follows:

"Prerequisites: Twenty-six University courses including two Psychology laboratory courses from Clause 1(b) of the requirements for a Major in Psychology."

37.24 Joint Major in Computer Science and Physics

Page 184, 1994-95 Calendar, delete current entry, Joint Major in Computer Science and Physics and replace with the following:

"Joint Major in Computer Science and Physics

The following courses are prescribed:

1. Chemistry 1000 and 1001 or equivalent.
2. 13 Computer Science courses are required for the Joint Major:

1700, 2710, 2711, 2740, 2741, 3711, 3714, 3724, 3725, 3731, 3740, 4718, and 4721.
3. (a) Physics 1050 and 1052, or Physics 1200, 1201 and 2050.

(b) At least 10 additional Physics courses including 2053, 2054, 2055, 2056, 3220, 3400, 3500, 3550, 3750 and 3900.
4. Physics 3810 or AM/PM 3202.
5. (a) Mathematics 1000 and 1001, or Mathematics 1080, 1081 and 1001.

(b) Mathematics 2000, 2050, Statistics 2510 and AM/PM 3260."

37.25 Department of Chemistry

Page 193, 1994-95 Calendar, amend the entry Programmes in Chemistry with the following:

"PROGRAMMES IN CHEMISTRY

The following undergraduate programmes are available in the department:

- Major* or Honours* in Chemistry
- Joint Honours in Chemistry and Earth Sciences*
- Joint Honours in Chemistry and Applied Mathematics*
- Joint Honours in Chemistry and Biochemistry*
- Joint Honours in Chemistry and Physics*
- Minor in Chemistry

* These programmes are accredited by the Canadian Society

for Chemistry.

Details of joint programmes are given after the Honours B.Sc. Regulations."

Add the following between Programmes in Chemistry but before Minor in Chemistry:

"UNDERGRADUATE HANDBOOK

Additional information about the undergraduate programme, individual courses and suggested timetables can be found in the Department of Chemistry Undergraduate Handbook which is available from the General Office, Department of Chemistry.

FACULTY ADVISORS

Each student majoring in Chemistry will be assigned a Faculty Advisor who should be consulted on all academic matters. Individual programmes must be drawn up in consultation with the advisor.

Note: Students who have obtained a grade of 3 or better on the Advanced Placement courses in Chemistry will normally be eligible for direct entry into Chemistry 1001. Such students must consult the department before registration."

Following the heading Minor in Chemistry replace the number 240A/B with the following:

"2400, 2401,".

Following the heading General Degree - Major in Chemistry, Required Courses, clause (a) replace the number 240A/B with the following:

"2400, 2401,".

Delete from "Prospective Chemistry Majors in their first year should take..." to end of paragraph beginning "Candidates for B.Sc./B.Ed. conjoint degree..." and replace with:

"Prospective Chemistry Majors in their first year should take

- a) English 1080, 1110 (or equivalent)
- b) Mathematics 1000, 1001 (or 1080, 1081)
- c) Chemistry 1000, 1001
- d) Physics 1050, 1052 (or 1200, 1201)
- e) 2 electives"

Following the heading Honours Degree in Chemistry insert new first sentence:

"Students wishing to take Honours should consult those sections of the Calendar dealing with 'Regulations for the

Honours Degree of Bachelor of Science'."

Following the heading Honours Degree in Chemistry, Required Courses, clause (a) replace the number 240A/B with the following:

"2400, 2401,".

Following the paragraph "A thesis based...submitted in the final year" add the following:

"Chemistry 490A/B will normally require the equivalent of 9 hours/week for 2 semesters. Registration in Chemistry 490A/B is restricted to those students who have honours standing. Evaluation of the dissertation will be pass/fail, assessed by a committee comprised of the supervisor and two other faculty members."

Following the paragraph "Prospective Honours students should take...e) two other courses" add the following:

"Given appropriate circumstances the Honours Chemistry programme may be completed in four years. Students should consult the Undergraduate Student Handbook for timetabling details.

Note: Chemistry 1800, Physics 1200, Mathematics 1080 may not be included as electives towards the 40 credit Honours programme. Students who include these courses in their first year programme will need the corresponding number of extra credits to obtain an Honours degree."

Following the heading Course List add the following:

"Note: attendance for ALL Chemistry Laboratory sessions is mandatory. Failure to attend may result in a failing grade or deregistration from the course."

Page 194, following the prerequisite for Chemistry 3400 amend to read as follows:

"Prerequisite: Chemistry 2401. Students are recommended to read Chemistry 3500 concurrently."

Following the prerequisites for Chemistry 3500 amend to read as follows:

"Prerequisites: Chemistry 2210, 2300, 2401. Physics 2056 is strongly recommended."

Following the course description for Chemistry 4203 delete the following sentence:

"Laboratory: Three hours per week"

Page 182, 1994-95 Calendar, following the entry for Joint Honours in Computer Science and Geography insert the following:

"JOINT HONOURS IN COMPUTER SCIENCE AND PHYSICS

The following courses are prescribed:

1. Chemistry 1000 and 1001 or equivalents.
2. (a) Computer Science 1700, 2710, 2711, 2740, 2741, 3711, 3714, 3724, 3725, 3731, 3740, 4718 and 4721.
(b) Three additional Computer Science courses numbered 3000 or higher, including at least two numbered 4000 or higher.
3. (a) Physics 1050 and 1052, or Physics 1200, 1201 and 2050.
(b) Physics 2053, 2054, 2055, 2056, 3220, 3400, 3500, 3750, 3820, 3821, 4500, and 3230 or 3900.
4. Physics 490A/B or Computer Science 4780.
5. Physics 3810 or AM/PM 3202.
6. (a) Mathematics 1000 and 1001, or Mathematics 1080, 1081 and 1001.
(b) Mathematics 2000, 2001, 2050 and AM/PM 3260.

Statistics 2510 is recommended.

The topic for the Honours project or thesis, Computer Science 4780 or Physics 490A/B, must be chosen with the prior approval of both Departments."

37.27 Department of Geography

Page 134, 1994-95 Calendar, following the heading Geography, General Prerequisites (Core Courses) amend the first paragraph to read as follows:

"All students majoring in Geography must complete the following six core courses: 1010, 1011, 2001, 2102, 2195, 2302."

Amend the third paragraph to read as follows:

"Geography 1010 and 1011 are normally prerequisite to other courses in the core. For the purposes of requirements and prerequisites, Geography 1000 and 1001 are understood to be equivalents to 1010 and 1011. See the Sir Wilfred Grenfell College section of the calendar for the descriptions of

1000 and 1001. This prerequisite...of the Department."

Page 135, following the heading Minor in Geography amend the paragraph to read as follows:

"Candidates minoring in Geography must complete eight courses including: 1010, 1011, 2001, 2102, 2195, 2302."

Following the heading Concentration in Geography (B.Ed. Candidates) amend the paragraph to read as follows:

"Candidates for the B.Ed...six courses as follows:

- Geography 1010, 1011
- One of Geography 2001, 2102, 2302
- One of Geography 2490, 3290, 3320, 3490
- Plus any two other courses in Geography"

Insert new course descriptions for Geography 1010 and 1011 as approved by Senate at a meeting held April 12, 1994.

Page 182, following the heading Joint Honours Degree in Computer Science and Geography amend 2.a) by replacing Geography 1000, 1001 with 1010, 1011 and deleting 4260.

Page 182, following the heading Joint Honours Degree in Geography/Earth Sciences (B.Sc. Only) amend a) by replacing Geography 1000, 1001 with 1010, 1011.

Page 134, following the heading Major in Geography (B.A. or B.Sc.) amend paragraph three to read as follows:

"- Four (or five) further courses, at least two of which must be at the 4000-level. A selected... major requirements.

- Geography courses numbered 3215, 3990 - 3999, 4290, 4291, 4900 - 4919, 4990 and 4999 are special topics courses and honours courses. These cannot normally be used to fulfil the fifteen course minimum required for the major. They can, however, be used as elective courses above the major requirements."

Following the heading Course Descriptions delete the (E) designation from the following courses:

"Geography 2490, 3010, 3100, 3130, 3210, 3230, 3250, 3260, 3290, 3320, 3321, 3340, 3350, 3400, 3405, 3410, 3415, 3420, 3450, 3460, 3480, 3490, 3500, 3510, 3800, 4000, 4005, 4010, 4120, 4130, 4141, 4150, 4160, 4170, 4180, 4200, 4220, 4241, 4250, 4261, 4262, 4292, 4300, 4301, 4320, 4390, 4400, 4405, 4410, 4600, 4640, 4690, 4700."

Following the heading Course Descriptions delete the (L) designation from the following courses:

"Geography 3215, 3990-3999, 4290, 4291, 4900-4919, 4990 and 4999."

Amend the Important Note to read as follows:

"IMPORTANT NOTE: Specific prerequisites for courses may be waived only with permission of the instructor and the Head of Department."

Amend the prerequisite of Geography 4410 to read as follows:

"Prerequisites: Geography 3325."

Amend course description of Geography 3320 to read as follows:

"3320. Fisheries Geography. This course involves a study of the various elements which go to make up a fishery including the natural bases of fisheries, the primary sector, fishing settlement features, locational analysis of processing activities, the factors affecting distribution channels, marketing patterns, the conservation of fish resources and principles of fisheries management."

Amend the prerequisite of Geography 4430 to read as follows:

"Prerequisite: Geography 3303."

Amend the prerequisite of Geography 4261 to read as follows:

"Prerequisite: Geography 3260 and Mathematics 2050."

Page 184, following the heading Joint Major in Computer Science and Geography, 2a) delete the course number 4260 and add 4262.

Page 135, amend the course description of Geography 2102 to read as follows:

"2102. Physical Geography. The Global Perspective. A study of form, process, and change in natural systems at and near the surface of Earth, viewed as human environment. Emphasis is on global and regional scales in the systematic study of climate, water, landforms, and vegetation. Three hours of lecture and three hours of laboratory per week.
Note: Credit may not be obtained for 2102 and the former 2100 and 2101."

New course

3110. Physical Geography: Regional and Local Systems. An investigation of selected problems of the biogeophysical environment, mainly at the regional and local scales, using an integrated, systems approach.
Three hours of lecture and three hours of laboratory per

week.

Prerequisite: Geography 2102.

Corequisites: Geography 2195 and one of Geography 2220, Statistics 2500 or Statistics 2510."

Delete course description of Geography 3130 and 3160.

Amend the prerequisites of Geography 4150 to read as follows:

"Prerequisites: Geography 3110, 3150."

Amend the prerequisites of Geography 4160 to read as follows:

"Prerequisites: Geography 3110; Mathematics 1000 or 1081."

Page 183, 1994-95 Calendar, following the heading Joint Honours in Geography/Earth Sciences (B.Sc.) only, amend clause (d) as follows:

Delete "3130" and replace with "3110". (To be inserted in numerical order)

Page 134, following the heading Major in Geography (B.A. or B.Sc) amend D) to read as follows:

"D) 3110, 3120, 3140, 3150"

Insert the following phrase after the course descriptions for Geography 2102, 2200, 2220, 3110, 3120, 3140, 3150, 3170, 3200, 3220, 3250, 3260, 4120, 4130, 4141, 4150, 4160, 4170, 4200, 4220, 4250, 4261, 4262, 4405 but before any prerequisites:

"Three hours of lecture and three hours of laboratory per week."

Revised course description

2102. Physical Geography: The Global Perspective. A study of form, process, and change in natural systems at and near the surface of Earth, viewed as human environment. Emphasis is on global and regional scales in the systematic study of climate, water, landforms and vegetation. Three hours of lecture and three hours of laboratory per week.

Prerequisite: Geography 1010 and Geography 1011.

Note: Credit may not be obtained for 2102 and the former 2100 or 2101.

37.28 Department of Computer Science

Page 196, 1994-95 Calendar, amend course descriptions of Computer Science 2740, 2741, 3724, 3725 and 4735 to read as follows:

2740. Discrete Structures 1 (F) & (W). Basic concepts of logic. Propositional logic and its proof system. The language of predicate logic. Sets, functions and relations, induction and recursion. Basics of graph theory, elementary properties of graphs.
Prerequisite: Computer Science 1700.

2741. Discrete Structures 2 (F) & (W). A follow-up of Computer Science 2740 dealing with more advanced topics in Discrete Mathematics. These topics include: classical graph theoretic problems, operations, algebras, abstract algebraic constructions, more on set theory and predicate logic.
Prerequisite: Computer Science 2710 and 2740.

3724. Computer Organization (F) & (W). This course begins with elementary logic elements and progresses through boolean algebra, synthesis and analysis of combinational and sequential circuits, finally covering aspects of von Neumann machine organization. It deals with topics such as number systems, coding, arithmetic/logic units, register transfer languages, algorithmic state machines, PLA, Mux, One Hot implementations, microprogramming, memory, instruction processing cycle, etc.
Prerequisite: Computer Science 2711 and 2741.

3725. Computer Architecture (W). Using the background offered in Computer Science 3724, this course covers advanced topics in the areas of memory system organizations (eg. overlapping, interleaving, cache, associative memory, virtual memory, etc.), foundations of high-speed computations (eg. various types of dependencies, pipelining, co-operations and contentions, synchronizations, etc.), interfacing and communications, and alternative architectures (eg. RISC/CICS, VLIV, Superscalar, Systolic, etc.)
Prerequisite: Computer Science 3724.

4735. Advanced Matrix Computations and Applications (F). Continuation of Computer Science 4734. Advanced topics related to the eigenproblem, singular value problem and generalized eigenvalue problems. Applications of matrix computations is estimation and control theory.

New courses

3711. Algorithms and Complexity (W). This course introduces the most common and effective algorithm design techniques and their complexity analysis, and the theory of Np-completeness. Examples will be drawn from various fields such as graph theory and string matching.
Prerequisite: Computer Science 2711 and 2741.

4718. Software Methodology (F). This course studies topics associated with the design and implementation of large software systems. Social and ethical issues faced by the computing professional are also discussed in the

context of software engineering. In addition to class lectures, this course includes a compulsory three hour laboratory per week.

Prerequisite: Computer Science 3711 and 3714.

Following the course description of Computer Science 2711 add the following to the note:

"It is recommended that students complete Computer Science 2740 prior to registering for Computer Science 2711."

Page 197, delete course descriptions of Computer Science 3712, 3713 and 3741.

Following the heading Fourth Year Courses insert after "4715-4719" but before "Special Topics in Programming Languages" the following phrase:

"(excluding 4718)".

Amend the prerequisite for Computer Science 3751 to read as follows:

"Prerequisite: Computer Science 3711 and Mathematics 2050".

Amend the prerequisite for Computer Science 4711 to read as follows:

"Prerequisite: Computer Science 3740".

Amend the prerequisite for Computer Science 4721 to read as follows:

"Prerequisite: Computer Science 3725".

Amend the prerequisite for Computer Science 4740 to read as follows:

"Prerequisite: Computer Science 3711".

Amend the prerequisite for Computer Science 4741 to read as follows:

"Prerequisite: Computer Science 3740".

Amend the prerequisite for Computer Science 4751 to read as follows:

"Prerequisite: Computer Science 3711 and Mathematics 2050".

Amend the prerequisite for Computer Science 4753 to read as follows:

"Prerequisite: Computer Science 3711".

Amend the prerequisite for Computer Science 4754 to read as follows:

"Prerequisite: Computer Science 3725".

Amend the prerequisite for Computer Science 4756 to read as follows:

"Prerequisite: Computer Science 3711".

Page 195, following the heading Major in Computer Science amend clause 1.a) to read as follows:

"1.a) Computer Science 1700, 2710, 2711, 2740, 2741, 3711, 3714, 3724, 3725, 3740, 4718, and 4721."

Amend clause 1.b) to read as follows:

"1.b) At least two additional 4000-level Computer Science courses."

Amend clause 1.c) to read as follows:

"1.c) One additional Computer Science course at the 3000 level or beyond."

Following clause 1.c) delete the following sentence:

"The three courses in...of Computer Science."

Following the heading Honours in Computer Science amend clause 2.a) to read as follows:

"2.a) Computer Science 1700, 2710, 2711, 2740, 2741, 3711, 3714, 3724, 3725, 3740, 4718, 4721 and 4780."

Amend clause 2.b) to read as follows:

"2.b) Six additional Computer Science courses at the 4000 level."

Amend clause 2.c) to read as follows:

"2.c) Two additional Computer Science course at the 3000 level or beyond."

Following clause 2.c) delete the following sentence:

"The six courses required in...of Computer Science."

Page 182, following the heading Joint Honours Degree in Computer Science and Geography amend clause 1.a) to read as follows:

"1. a) 1700, 2710, 2711, 2740, 2741, 3711, 3714, 3724, 3725, 3740, 4718, 4721, and 4751."

Amend clause 1.b) to read as follows:

"1. b) Two additional courses at the 4000 level not including 4780."

Following clause 1.c) delete the following sentence:

"The six courses...of Computer Science."

Page 183, following the heading Statistics/Computer Science Joint Honours (B.Sc. only) amend clause c) to read as follows:

"c) Computer Science 1700, 2710, 2711, 2740, 2741, 3711, 3714, 3724, 3725, 3740, 4718, 4721, and 4734."

Amend clause d) to read as follows:

"d) Two additional courses in Computer Science at the 4000 level, not including 4780."

Following the heading Pure Mathematics/Computer Science Joint Honours (B.Sc. only) amend clause a) to read as follows:

"a) 1700, 2710, 2711, 2740, 2741, 3711, 3714, 3724, 3725, 3740, 4718, and 4721."

Amend clause b) to read as follows:

"b) Excluding 4780, five additional courses numbered 3000 or higher, at least three of which are at the 4000 level."

Following clause b) delete the following sentence:

“(The courses in (b)...of Computer Science);”.

Page 184, following the heading Joint Major in Computer Science and Geography, 1. Computer Science Requirements delete the word "including" from the first sentence.

Amend clause 1.a) to read as follows:

"1. a) 1700, 2710, 2711, 2740, 2741, 3711, 3714, 3724, 3725, 3740, 4718, 4721, and 4751."

Delete clauses 1.b) and 1.c) in their entirety.

Following the heading Statistics/Computer Science Joint Major (B.Sc. only) amend clause a) to read as follows:

"a) 2710, 2711, 2740, 2741, 3711, 3714, 3724, 3725, 3740, 4718, 4721, and 4734."

Delete clause b) in its entirety.

Page 185, following the heading Pure Mathematics/Computer Science Joint Major (B.Sc. only) amend clause a) to read as

follows:

"a) 2710, 2711, 2740, 2741, 3711, 3714, 3724, 3725, 3740, 4718, and 4721."

Amend clause b) to read as follows:

"b) Two additional courses in Computer Science numbered 3000 or higher,".

Page 197, following the course description of Computer Science 3731 delete the sentence "Recommended: A knowledge of FORTRAN." and insert the following:

"Consent of the Head of Department is required if Computer Science prerequisites are not met."

37.29 Majors and Honours Programmes in Biology

Page 189, 1994-95 Calendar, following the heading Honours Degrees delete the following third and fourth sentences of paragraph two:

"Of the remaining...in different languages."

Following the heading General Degree - Major in Biology amend the third paragraph to read as follows:

"All majors must also successfully complete the following courses or their equivalents:

- Statistics 2550
- Physics 1200/1201 or 1050/1052
- Chemistry 1000/1001, 2440
- Biochemistry 2101 and 3106"
- Extra Science courses as necessary to fulfil the requirement for 26 Science courses as stipulated in Clause 3 i. of the "REGULATIONS FOR THE GENERAL DEGREE OF BACHELOR OF SCIENCE"."

Page 190, amend the prerequisite or corequisite of Biology 3050 to read as follows:

"Prerequisite or corequisite: Chemistry 2440 or 240B or 2420."

Amend the prerequisites of Biology 3060 to read as follows:

"Prerequisites: Physics 1201 or 1052; Biochemistry 2101; at least two of Biology 2010, 2122, 2210."

Delete the phrase prerequisite or corequisite: Chemistry 240B of Biology 3060.

Amend the note following the course description for Biology 3160 by replacing the phrase "Biochemistry 3100" with the following:

"Biochemistry 3106."

Following the course description for Biology 3401 amend the prerequisite by replacing the phrase "Biochemistry 3100" with the following:

"Biochemistry 3106."

Following the course description for Biology 3402 delete the following sentence:

"Recommended: Biochemistry 3100" and replace with "Prerequisite or corequisite: Biochemistry 3106."

Following the course descriptions for Biology 3709 and 3750 amend the prerequisite by replacing the phrase "Statistics 2510" with the following:

"Statistics 2550".

Following the course description for Biology 3900 amend the prerequisite by deleting the phrase "Statistics 2510 and 2511" and replacing with the following:

"Statistics 2550".

and delete the following sentence:

"(2511 may be taken as a corequisite)".

Following the course description for Biology 4181 amend the prerequisite or corequisite by replacing the phrase "Biochemistry 3100" with the following:

"Biochemistry 3106".

Amend the prerequisite for Biology 4241 to read as follows:

"Prerequisites: Biology 3050, 3250, 4404; Biochemistry 2101."

Following the course description for Biology 4245 amend the prerequisite by replacing the phrase "Biochemistry 3100" with the following:

"Biochemistry 2101".

Following the course descriptions for Biology 4404 and 4601 amend the prerequisites by replacing the phrase "Biochemistry 3100" with the following:

"Biochemistry 3106"

Following the course description for Biology 4605 amend the prerequisites by replacing the phrase "Statistics 2510" with the following:

"Statistics 2550"

37.30 Joint Honours in Cell Biology, Microbiology, and Biochemistry

Page 181, following the heading Joint Honours in Cell Biology/Microbiology and Biochemistry delete the entry in its entirety and replace with the following:

"Students must have at least an overall average of 65% in English 1080 and 1110 (or equivalents), Mathematics 1000 and 1001 (or Mathematics 1080, 1081 and 1001), Biology 1001 and 1002, Chemistry 1000 and 1001, Physics 1050 and 1052 (or Physics 1200, 1201 and 2050).

The following courses, including prerequisites where applicable, will be required:

- a) Biochemistry 2100, 2101, 3105, 3106, 3107, one of 4210, 4211, four of 4002, 4101, 4102, 4103, 4104, 4200, 4201.
- b) Biology 2010, 2122, 2210, 2600, 3050, 3060, 3250, 3900, one of 3402 or 4404, and three of 3202, 3500, 3530, 3620, 4000, 4200, 4241.
- c) Either Biochemistry 311A/311B or Biology 3401 plus an approved elective.
- d) Chemistry 2400, 2401, 2300, 3100, 3400.
- e) Statistics 2510 and 2511 or Statistics 2550.
- f) An Honours Dissertation (Biology 499A/499B or Biochemistry 499A/499B).

The topic of the Honours dissertation must be chosen with the approval of both Departments. A faculty member of either Department may act as supervisor.

Twenty-six (26) courses in Biology, Biochemistry and Chemistry beyond the first-year level from those listed in the programme shall contribute to those in which a grade of "B" or an average of 75 or higher is required."

37.31 Minor Calendar Changes to Joint Honours Biology and Earth Sciences associated with the changes being introduced in Biology

Page 182, 1994-95 Calendar, following the heading Biology and Earth Sciences (Geology) Joint Honours amend clause b) to read as follows:

- "b) Chemistry 2440, Biochemistry 2101, Biochemistry 3106, Statistics 2550 or 2510."

37.32 Department of Mathematics and Statistics

New course

2550. Statistics for Life Science Students. An introduction to basic statistical methods with an emphasis

on those aspects applicable to the life sciences and, in particular, to biology. Statistical computer packages will be used in this course.

Prerequisites: Mathematics 1000 or Mathematics 1081.

Note: Credit cannot be obtained for both ST 2550 and any of ST 2500, ST 2501, ST 2510, ST 2511, Psychology 2900, and Psychology 2901.

Page 207, following the heading Statistics Courses amend the note to read as follows:

"Note: Statistics courses 2500, 2501, 2510, 2511, 2550, 4590, and 4591 have a laboratory period weekly."

Amend the notes following course descriptions for Statistics 2500, 2501, 2510 and 2511 as follows:

Insert "ST 2550" in numerical order.

37.33 Department of Chemistry

New course

2440. Organic Chemistry for Biologists (F) & (W). An introduction to the principles of organic chemistry with an emphasis on material relevant to biological molecules. The laboratory will introduce techniques and illustrate concepts covered in the course.

Prerequisite: Chemistry 1001 or its equivalent.

Lectures: Three per week.

Laboratory: Three hours per week.

Note: This course is designed primarily for Biology Majors. It may not be used for credit by Chemistry or Biochemistry Majors and may not serve as a prerequisite for any other Chemistry course. Credit may be obtained for only one of Chemistry 2400, 2420, 2440, 240A/B.

Delete the entry for Chemistry 240A/B and insert the following between Chemistry 2300 and 2420:

"2400 (F) and 2401 (W). (Formerly 240A/B). Introductory Organic Chemistry. A study of the principal classes of organic compounds, their synthesis, properties and reactions.

Prerequisite: Chemistry 1000 and 1001 or equivalent with a combined average of 65%. Chemistry 2400 is a prerequisite for Chemistry 2401.

Lectures: Three per week.

Laboratory: Three hours per week.

Note: Credit may be obtained for only one of Chemistry 240A/B, 2400, 2420 or 2440."

Delete the entry for Chemistry 440A/B and insert the following after Chemistry 4350:

"4400 (F) (formerly 440A), Physical Organic Chemistry I. Methods and Techniques: quantitative and qualitative

theories of reactions and reactivity for organic molecules.

Prerequisites: Chemistry 3301, 3401 and 3500.

Lectures: three per week.

4401 (W) (formerly 400B), Physical Organic Chemistry II.

Applications: organic reaction mechanisms and their elucidation.

Prerequisites: Chemistry 4400.

Lectures: three per week.

Note: Credit may be obtained for only one of (i) 440A/B or (ii) 4400 and 4401."

37.34 Regulations for the Honours Degree of Bachelor of Science - Amendment

Page 180, following the heading Regulations for the Honours Degree of Bachelor of Science delete clause 2.a) and replace with the following:

2.a.(i) For the Honours Degree of Bachelor of Science with a single subject major a candidate will be required to have completed 40 prescribed courses. For the Joint Honours Degree of Bachelor of Science a candidate will be required to have completed 45 prescribed courses.

(ii) Clause 2.a.(i) notwithstanding, certain Departmental regulations preclude the possibility of completing a single subject Honours degree in 40 courses and may require the completion of 41, 42 or 43 courses. (See Note 1 below). In such cases all courses required to satisfy requirements of the degree will be used to determine Academic Standing 6(ii) below.

Note 1. The requirements for an Honours Degree of Bachelor of Science cannot be completed in 40 courses if any of the following three statements is true: (i) the student is a major in Chemistry, Earth Sciences, or Physics and has completed Mathematics 1080; (ii) the student is a major in Chemistry or Physics and has completed Chemistry 1800; (iii) the student is a candidate for the Honours B.Sc. Degree in Chemistry, Earth Sciences (Geophysics), or Physics and has completed Physics 1201. Such students will only meet degree requirements after completing 41, 42 or 43 courses.

37.35 Department of Biochemistry

Page 179, following the heading Regulations for the General Degree of Bachelor of Science amend clause 2.c) to read as follows:

"The twelve or more...Biochemistry (see notes 7 and 8), Chemistry, Computer Science..."

Add new note:

"7) In the case of Biochemistry the courses for the Biochemistry programme shall include Chemistry 2400 and 2401."

Page 180, following the heading Regulations for the Honours Degree of Bachelor of Science, 2. Course Requirements delete note 1 following paragraph b) and replace with the following:

"1) For options in the Biochemistry, Dietetics and Nutrition programmes the courses shall be those specified in the respective programmes."

Page 185, following the heading Biochemistry, Programmes delete the following sentence from the first paragraph:

"- Major or Honours in Food Science".

Delete the second paragraph and replace with the following:

"Students who wish to enrol in any of these programmes should plan their programme well in advance so that they will have taken the appropriate prerequisites. Entry to a number of required courses is limited and will be determined by academic performance. Required courses should be taken in the year indicated by the course numbers so as to avoid timetable clashes and missing prerequisites which could prolong the time necessary to complete the programme. Students are advised to consult with the Department at the earliest opportunity."

Delete the fourth paragraph "In particular, ...".

Following the heading Biochemistry Programme, General Degree in Biochemistry delete the subheading Required courses and entire entry and replace with the following:

"Required courses to complete the major:

- a) Biochemistry 2100, 2101, 3105, 3106, 3107.
- b) At least FIVE courses from Biochemistry 3200, 3201, 4002, 4101, 4103, 4104, 4200, 4201, 4210, 4211. A student may not take both 4210 and 4211.
- c) Biochemistry 311A, 311B or 2 courses from Biology 3050, 3060, 3250, 3401, 3402, 3530, 4200, 4245, 4404.
- d) Biology 1001, 1002.
- e) Chemistry 2300, 2400, 2401, 3100.

Note: Students are required to complete at least 26 Science courses for the General Degree.

Students are encouraged to choose a minor."

Delete the entire entry Honours Degree in Biochemistry and replace with the following:

"Honours Degree in Biochemistry

Students normally should apply for an Honours programme at the completion of their second year of studies. To be considered for admission to an Honours programme in Biochemistry, students must have achieved at least 70% in each of Biochemistry 2100 and 2101 and Chemistry 2401.

Required courses in addition to those required for admission to honours:

- a) Biochemistry 3105, 3106, 3107, 311A, 311B, 4102, 499A, 499B.
- b) Biochemistry 4210 or 4211.
- c) Four of Biochemistry 4002, 4101, 4103, 4104, 4200, 4201.
- d) Biochemistry 3200/3201 or 2 of Biology 3050, 3060, 3250, 3530, 4200, 4245, 4404.
- e) Biology 1001, 1002.
- f) Chemistry 2300, 3400.
- g) One of Chemistry 3100 or 3500.
- h) Statistics 2510, 2511.

Students are encouraged to choose a minor.

Those courses in which a grade "B" or an average of 75% or higher are required, as specified in paragraph 6(i) of the Regulations for the Honours Degree of Bachelor of Science, are fifteen Biochemistry courses, Chemistry 2400, 2401 and three other courses (beyond the 1000-level) chosen from Biochemistry, Biology or Chemistry."

Following the heading Minor in Biochemistry delete the first paragraph and replace with the following:

"Students who take a minor in Biochemistry will complete:

- a) Biochemistry 2100, 2101, 3106.
- b) Chemistry 2400, 2401.
- c) three of Biochemistry 3105, 3107, 4002, 4101, 4103, 4104, 4200, 4201; OR two of the above and one of Chemistry 4201, 4411, Biology 3050, 3060, 3250."

Page 186, delete the entire entry including title for Food Science Programme.

Following the heading Nutrition Programme, General Degree in Nutrition add the following:

Amend the section Required courses to read as follows:

"Required courses to complete the major:

- a) Biochemistry 2000, 2100, 2101, 3106, 311A, 311B, 3200, 3201, 3401, 3402, 4300, 4301, 4302, 4502.
- b) Biology 1001, 1002, 3050.
- c) Chemistry 2400, 2401.
- d) Computer Science 1700 or 2602.
- e) Statistics 2500 or 2510 or Psychology 2900.

Students are encouraged to choose a minor."

Following sub-heading, Honours Degree in Nutrition delete entire entry and replace with the following:

"Students normally should apply for an Honours programme at the completion of their second year of studies. To be considered for admission to an Honours programme in Nutrition, students must have achieved at least a B grade in Biochemistry 2000, 2100 and 2101, Chemistry 2401.

In addition to the courses required for the general degree, the programme shall include:

- a) Biochemistry 3107, 4002, 4999
- b) Three of Biochemistry 4101, 4103, 4104, 4200, 4201, 4211, 4220, 4400.
- c) Statistics 2501 or 2511 or Psychology 2901.

Those courses in which the grades specified in clause 6(i) of the Regulations for the Honours degree of Bachelor of Science are 20 Biochemistry."

Following the sub-heading Minor in Nutrition amend the first paragraph to read as follows:

"Students who take a minor in Nutrition will complete:

- a) Biochemistry 2101, 3106, 311A, 311B, 3200, 3201
- b) Two of Biochemistry 4300, 4301, 4302."

Following the heading Professional Programme in Dietetics amend the first paragraph to read as follows:

"For professional qualification as a dietitian, students are required to complete the degree in Dietetics, followed by a year of study in an approved Dietetic Internship."

Following the sub-heading Admission to Dietetics delete the following word from the first sentence of the fourth paragraph:

"normally".

Amend the entry Required courses at Memorial to read as follows:

"Required courses at Memorial:

- a) Biochemistry 2000, 2010, 2011, 2100, 2101, 3106, 311A, 311B, 3200, 3201, 3401.
- b) Biology 1001, 1002 (if not taken in first year), 3050.
- c) Business 2000 and 2001.
- d) Chemistry 2400, 2401.
- e) Statistics 2510, 2511 or 2500, 2501.

f) Two courses in social sciences if Psychology 1000
and
1001 were not taken in first year."

Amend the entry Honours Degree in Dietetics to read as follows:

"Honours Degree in Dietetics

In addition to the courses required for the general degree, the programme shall include:

- a) Biochemistry 4999.
- b) One additional 4000 level course in Nutrition at Memorial or Acadia.
- c) Computer Science 1700 or 2602.

The twenty courses in clause 6(i) of the Regulations for the Honours degree of Bachelor of Science are the required Biochemistry in the programme outlined above and the Nutrition and Foods courses at Acadia."

Page 187, following the heading Courses in Biochemistry delete the note.

Following the heading Courses in Food Science and Nutrition delete the paragraph following the heading "The following courses...".

Delete the entries for Courses in Biochemistry and Courses in Food Science and Nutrition in their entirety and replace with the following:

"COURSE LIST".

Following the heading Course List amend the courses to read as follows:

"2000. Principles of Food Science. This course enables one to gain an understanding of the scope of Food Science as a discipline. Topics include introductions to chemistry, processing, analysis, microbiology, packaging, product development, sensory evaluation and quality control as they are related to Food Science.

Corequisite: Chemistry 2400.

Prerequisite: Chemistry 1001.

Lectures: Three hours per week.

Laboratory: One period per week.

2010. Introductory Foods I. An introduction to the science of food and food preparation. Topics covered include fats and oils, simple and complex carbohydrates, fruits and vegetables, cereals and starches. Laboratory work applies scientific principles and theories to practical problems in food preparation.

Prerequisites: Chemistry 1001.

Lectures: Three hours per week.
Laboratory: Three hours per week.

2011. Introductory Foods II. An introduction to the science of food and food preparation. Topics covered include proteins - dairy products, eggs, meats and fish, legumes, gelatin and flour proteins, batters and doughs, meal management and menu planning. Laboratory work applies scientific principles and theories to practical problems of food preparation.

Prerequisites: Chemistry 1001, Biochemistry 2010.

Lectures: Three hours per week.
Laboratory: Three hours per week.

2100. Introduction to Molecular Biology and Genetics. From phenotype to genotype: this course will cover the heritability of simple traits; the discovery of DNA as the molecule of heredity; the structure and function of DNA; the elucidation of the genetic code; and the manipulation of DNA for recombinant DNA technology and biotechnology.

Prerequisites or Corequisites: Biochemistry 2101, Chemistry 2401 and Physics 1201 (or 1052).

Lectures: Three hours per week.
Laboratory: Three hours on alternate weeks.

2101. Introduction to Biochemistry. An introduction to the major organic substances of living organisms, proteins, carbohydrates and lipids: their structure, analysis and biochemical function. Enzymes. Biochemistry of membranes: plasma membrane and specialized intracellular membranes. Biochemistry of selected differentiated cells.

Prerequisites: Chemistry 2400, 2401 or Chemistry 2440 and Physics 1200, 1201 or 1050, 1052. Chemistry 2401 and Physics 1201 or 1052 can be done concurrently.

Lectures: Three hours per week.
Laboratory: One three-hour laboratory period on alternate weeks to illustrate concepts covered in the lectures.
Note: Credit may be obtained for only one of 2101, 3100, or Pharmacy 3110.

2430. Biochemistry for Nurses. An introductory course in Biochemistry dealing with the metabolism of proteins, carbohydrates and lipids, and the function of enzymes and hormones. Special emphasis will be given to the biochemical fluctuation that occurs in human health and disease. The course may not be used for credit to fulfil the requirements for a Biochemistry major. Preference for entry into this course will be given to students in the School of Nursing.

Prerequisite: Chemistry 2420.

Lectures: Three hours per week.
Tutorial: One three-hour case study tutorial on alternate weeks.

3100. Introduction to Biochemistry. An introductory course dealing with the chemistry and metabolism of proteins, lipids and carbohydrates. Emphasis will be given

to the properties of proteins, including enzymes, and the utilization of energy. This course is professionally approved for Dietetics Majors and is a required course for Biology and Biochemistry Majors.

Prerequisites: Chemistry 2400 and 2401, and Physics 1200 and 1201 (or Physics 1050 and 1052).

Lectures: Three hours per week.

Laboratory: One period per week.

Note: Credit may be obtained for only one of 3100, the former 3103, or Pharmacy 3110.

Note: Will not be offered after 1995-96.

3102. General Biochemistry. Molecular Biology and the Metabolism of carbohydrates, amino acids and complex lipids. The metabolic specialization of differentiated cells and tissues, the coenzyme functions of vitamins, and the genetic code and its expression in protein synthesis will be covered. This course is professionally approved for Dietetics Majors and is recommended as a second Biochemistry course for students who have done Biochemistry 3100.

Prerequisite: Biochemistry 3100.

Lectures: Three hours per week.

Laboratory: One period per week.

Note: Credit may be obtained for only one of 3102, the former 3104, or Pharmacy 3111.

Note: Will not be offered after 1995-96.

3105. Physical Biochemistry. Introduction to intramolecular forces. Methods to assess the size and shape of macromolecules. Radioisotopes. Ligand binding. Thermodynamics. Redox reactions. Transport across membranes.

Prerequisites: Biochemistry 2101, Chemistry 2300, Physics 1052 or 2050.

Lectures: Three hours per week and a two hour problem-solving class.

3106. Metabolism. The catabolism of carbohydrates, lipids and amino acids. Mitochondria, chloroplast and ATP synthesis. Biosynthesis of carbohydrates and lipids. Metabolic specialization of differentiated cells and tissues. Integration of metabolism.

Prerequisite: Biochemistry 2101.

Lectures: Three hours per week.

Practical classes: One three-hour laboratory or one-hour tutorial per week.

Note: Will not be offered in 1995-96.

3107. Nucleic Acid Biochemistry and Molecular Biology. The structure, function and biochemistry of DNA and RNA and the biochemical processes in the flow of information from the gene to protein. These will include: DNA replication, recombination and repair processes; transcription of RNA and RNA splicing; and, protein synthesis. The regulation of gene expression will also be covered at an introductory level. The course will also include an introduction to

cloning methodology.

Prerequisite: Biochemistry 2100.

Lectures: Three hours per week.

Laboratory: One three-hour laboratory or one-hour tutorial per week.

Note: Will not be offered in 1995-96.

311A and 311B. Human Physiology. (Same lectures as Medicine 310A and 310B. This course is taught and administered by the Faculty of Medicine.) Topics covered include the properties of nerves and muscle cells, the nervous system, the special senses, blood and body fluids, the cardiovascular system, the gastrointestinal tract, respiration, renal function, endocrinology and reproduction. Integration of the body's systems in maintaining homeostasis will be emphasized.

Prerequisite or corequisite: Biochemistry 3106.

Lectures: Three hours per week.

Laboratory: To be specified.

Priority for entry into this course will be given to Biochemistry, Nutrition, Dietetics, and other students who are interested in experimental science.

Note: Credit may be obtained for only one of Biochemistry 311A/B or Medicine 310A/B.

3200. Basic Human Nutrition I. A study of the nutrients essential to human health and well-being with emphasis on carbohydrates, proteins and lipids-chemistry, dietary source, dietary requirements, metabolism, physiological importance.

Prerequisites: Biochemistry 2101

Corequisite: Biochemistry 3106; or Pharmacy 3112

Lectures: Three hours per week

3201. Basic Human Nutrition II. A study of the vitamins, minerals and trace elements essential to human health and well-being - chemistry, dietary source, dietary requirements, physiological role, deficiency syndromes.

Prerequisites: Biochemistry 3200.

Lectures: Three hours per week

3401. Food Microbiology. Study of the microbiology of water and food with regard to the beneficial and detrimental roles of microorganisms on interaction with these systems. Emphasis will be on the microbiology of food, fermentations, food spoilage and food borne vectors of human disease.

Prerequisite: Biology 3050.

Lectures: Two hours per week.

Laboratory: Four hours per week.

3402. Food Chemistry. Water structure and the role of water in chemical reactions and mechanical properties of foods. Chemistry and physical properties of carbohydrates, proteins and lipids. Food dispersions. Pigments and natural colorants. Food flavour. Enzyme properties and applications. Vitamins and minerals. Chemistry of enzymic

and non-enzymic browning. Characteristics of: a) muscle tissue, b) milk, c) eggs, d) bread and e) edible plant tissue. Food additives. Chemical changes in foods during processing.

Prerequisites: Biochemistry 2000; Biochemistry 2101 or 3100.

Lectures: Three hours per week.

Laboratory: One period per week.

4002. Biochemical Regulation. Control theory. Metabolic regulation at the cellular and multicellular level.

Hormones: their biosynthesis and mechanism of action.

Signal transduction. Endocrine coordination of metabolic processes. Principles will be illustrated by the use of case studies from the medical and veterinary literature.

Prerequisites: Biochemistry 2100, 3106.

Lectures: Two to three hours per week, together with assigned reading and case studies.

4101. Proteins. Regulatory properties of enzymes; Mechanism of enzyme action. Methods for determining protein structure. Relation of protein structure to function. Protein evolution.

Prerequisite: Biochemistry 3105.

Lectures: Two to three hours per week and assigned reading.

4102. Current Topics in Biochemistry. A seminar course in which faculty and students will discuss topics of current interest in the biochemical literature. Students will be responsible for reading and critically assessing recent literature.

Prerequisites: Admission to this course is restricted to Honours Biochemistry students in their final year or by permission of the Head.

4103. Prokaryotic Gene Regulation. A detailed and up-to-date treatment of the mechanisms of genetic regulation found in bacterial cells. The course will develop topics based on the evidence of bacterial genetics and modern molecular biological experiments. Topics may include: theory of mutations, RNA transcription, positive and negative regulation of transcription; regulation of protein synthesis; control of DNA replication; bacterial operons and regulons; developmental molecular biology in bacterial systems; and, evolution and molecular biology of organelles.

Prerequisite: Biochemistry 3107.

Lectures: Three hours per week.

Note: Will not be offered in 1995-96.

4104. Eukaryotic Gene Regulation and Developmental Biology. This course will detail the cellular and molecular aspects of eukaryotic gene regulation and development. Topics to be covered will include the DNA content and organization of eukaryotes, mechanisms controlling the expression of eukaryotic genetic

information at the transcriptional and post-transcriptional levels, and the methodologies used to define these mechanisms. Detailed consideration will be given to the cell-surface events which regulate nuclear gene expression and cell lineage specification. Developmental mechanisms operating in a number of model systems will be discussed. Prerequisite: Biochemistry 3107. Lectures: Three hours per week.

4200. Bioenergetics and Biological Oxidation. Respiration and electron transport. Functional organization of energy transducing membranes. The structure and function of flavoenzymes, cytochromes, iron-sulfur proteins and quinones. Enzyme reduction of oxygen. Free radicals in biological systems. Prerequisite: Biochemistry 3106. Lectures: Two to three hours per week and assigned reading.

4201. Membranes - Structure, Function and Biosynthesis. The biosynthesis of the different components of biological membranes. The structure of model and biological membranes, the molecular interactions between membrane components and the effects of these interactions on the biophysical and functional properties of membranes. Transport of molecules across biological membranes. The transport of lipids by plasma lipoproteins and their role in certain diseases. Prerequisite: Biochemistry 3106. Lectures: Two to three hours per week and assigned reading.

4210. Biochemical Research Techniques I. A course designed to familiarize students with methods used for the study of structural and molecular biology. Prerequisites: Biochemistry 3105, 3107. Lectures and laboratory periods: times as arranged. Attendance is required.

4211. Biochemical Research Techniques II. A course designed to familiarize students with methods used for the study of cellular and subcellular metabolism. This course may include a research project. Prerequisite: Biochemistry 3106. Lectures and laboratory periods: times as arranged. Attendance is required.

4220. Introduction to General and Autonomic Pharmacology. (Same as Medicine 4300). This course will deal with the general principles of pharmacology (receptors, absorption, distribution, metabolism, pharmacokinetics) drugs affecting peripheral nerve transmission and the cardiovascular system. Prerequisites: Biochemistry 3106, 311A, 311B. Lectures: Three hours per week. Laboratory: Three hours per week. Note: Credit may be obtained for only one of Biochemistry

4220 or Medicine 4300.

4300. Advanced Nutrition. Nutritional considerations throughout the life cycle, with particular emphasis on infant, maternal, and geriatric nutrition.

Prerequisites: Biochemistry 3200 and 3201.

Lectures: Three hours per week.

4301. Nutrition and Disease. A study of the role of nutrition in specific disease processes. Nutritional management in these diseases will be discussed.

Laboratories will deal with practical therapeutic problems and may involve appropriate field trips.

Prerequisites: Biochemistry 3200 and 3201.

Lectures: Three hours per week.

Laboratory: Three hours per week.

4302. Community Nutrition. Nutritional assessment, nutrition education, and the role of community agencies and individuals in the dissemination of nutritional information. Survey methods and results will be discussed.

Prerequisites: Biochemistry 3200 and 3201.

Lectures: Three hours per week.

4400. Food Analysis. A study of the standard methods of analysis for the principal foodstuffs as well as an introduction to some modern instrumental procedures.

Prerequisites: Biochemistry 3402.

Lectures: Three hours per week.

Laboratory: One period per week.

4502. Current Topics in Nutrition. A seminar course in which faculty and students will discuss topics of current interest in the area of nutrition. Students will be responsible for reading and critically assessing recent literature.

Prerequisites: two of Biochemistry 4300, 4301, 4302 and permission of the Head.

499A/499B. Dissertation. A two-semester linked course based on independent study of a problem in Biochemistry. The subject of study will be decided in consultation with Faculty advisors and must be approved in advance by the Department, or both Departments in the case of a Joint Honours degree. This dissertation is obligatory for Honours students in Biochemistry. The dissertation will be submitted as a formal written report accompanied by appropriate illustration before the end of the tenth week of the second semester. Before the end of his/her final semester the student will give an oral presentation of his/her research.

4999. Dissertation. A one-credit dissertation for Honours students in Dietetics and Nutrition. The dissertation will be based on independent study of a problem in Dietetics or Nutrition. The subject of study will be decided in consultation with Faculty advisors and must be approved in

advance by the Department. This dissertation is obligatory for Honours students in Dietetics or Nutrition. The dissertation will be submitted as a formal written report accompanied by appropriate illustrations before the end of the semester."

37.36 Department of Biology

Page 189, 1994-95 Calendar, following the heading Honours Degrees replace the phrase "Twenty-four" in the second paragraph with the following:

"Twenty-three".

Following the heading Honours in Biology replace the word "thirteen" in the second sentence with the following:

"twelve".

Following the heading Honours in Cell Biology/Microbiology delete the last paragraph beginning with "plus seven elective...-Biochemistry 3401" and replace with the following:

"plus six elective Biology courses chosen in consultation with the Supervisor or Faculty Advisor. At least four of the six courses must be chosen from the following list or from the above-listed courses not previously taken:
- Biology 3500, 3540, 3620, 4000, 4012, 4040, 4130, 4245, 4402, 4605, 4822."

Following the heading Honours in Ecology/Evolution in the second paragraph replace the word "six" with "five".

Page 190, following the heading Honours in Entomology/Parasitology replace the words "five" and "six" in the second paragraph with the following respectively:

"four" and "five".

Following the heading Honours in Marine Biology in the second paragraph replace the word "six" with "five".

37.37 Department of Computer Science

A memorandum dated December 28, 1994, was received from the Department of Computer Science advising that while the department is in general not in favour of reducing the number of courses in the Honours programme, it would be willing to consider reducing the number of required courses to 40, provided that the Honours regulations for the department be held the same as at present. Essentially, this means that the reduction would be in elective courses coming from outside the department, preferably outside the faculty of Science.

A sample 40 course Honours programme was provided.

37.38 Department of Earth Sciences

Page 200, 1994-95 Calendar, replace the entire Earth Sciences entry before Course List with the following, except where specific sections to be retained as in the 1994-95 Calendar are noted.

EARTH SCIENCES

PROGRAMMES IN EARTH SCIENCES

The following undergraduate programmes are available:

40 course programmes

- Honours or General degrees in Earth Sciences (Geology)
- Honours or General degrees in Earth Sciences (Geophysics)
- Joint Major in Earth Sciences/Physics

45 course programmes

- Joint Honours in Earth Sciences/Physics
- Joint Honours in Biology and Earth Sciences (Geology)
- Joint Honours in Earth Sciences (Geology)/Chemistry
- Joint Honours in Geography/Earth Sciences

8 course programme

- Minor in Earth Sciences

Although Honours programmes can be completed in 40 courses, students who do not select the prescribed common block of required courses will normally need more than 40 courses to satisfy degree requirements.

Details of joint programmes are given after the Faculty of Science Honours B.Sc. regulations.

ENTRANCE REQUIREMENTS

In order to be formally admitted to major programmes in Earth Sciences, students must have successfully completed one first-year course in each of the following departments: English, Mathematics, Earth Sciences, Chemistry and Physics; these courses must be selected from the list of required courses for degree programmes in Earth Sciences. Students are encouraged to declare their major in their first year of study at the university.

Most of the 2000-level Earth Sciences courses that are required for major and minor programmes in Earth Sciences have Physics and Chemistry prerequisites, and students are advised to complete these prerequisites in their first year of study.

MINOR IN EARTH SCIENCES

A Minor in Earth Sciences will consist of the following

courses:

- a) Earth Sciences 1000, 1001, 2030, 2031, 2310.
- b) Three of Earth Sciences 2400, 2502, 2503, 3053, 3161, 3170, 3172, 3210, 3400, 3600, 3611, 3701, 3811, 4610, 4302, 4901, 4902, 4903. At least one of these courses must be at 3000-level or higher.

Several of the courses at 3000-level or higher have Earth Sciences 2502 or 2503 as prerequisites.

MAJOR PROGRAMMES IN EARTH SCIENCES

Programmes in Earth Sciences consist of a common block of required courses (below), and additional courses that depend on the degree being sought.

COMMON BLOCK OF REQUIRED COURSES

All majors in Earth Sciences must complete the following courses:

- a) English 1080 & 1110 (or equivalent), Mathematics 1000* & 1001, Earth Sciences 1000 & 1001, Chemistry 1000 & 1001, Physics 1050* & 1052*.
- b) Earth Sciences 2030, 2031, 2310, 2502.
- c) Mathematics 2000 or Statistics 2510. Earth Sciences (Geophysics) students must select Mathematics 2000.

*Some students may find it necessary or desirable to substitute Mathematics 1080 and 1081, and/or Physics 1200 and 1201 for specified first-year Mathematics and Physics requirements. Earth Sciences (Geophysics) students, if they elect to take Physics 1200 and 1201, must also complete Physics 2050 as a prerequisite for higher level Physics courses. If these alternate course combinations are selected, the number of courses required to satisfy point (a) may exceed ten. For Honours B.Sc. programmes, students who complete such additional courses under point (a) will only be able to graduate after completing more than 40 courses. For General B.Sc. programmes, such additional courses under point (a) count as credits toward the 40 course degree.

Students must ensure that the prerequisites for Earth Sciences courses are fulfilled. Great difficulties in timetabling may be encountered if the required first-year courses are not completed before the beginning of second year.

HONOURS B.Sc. DEGREE IN EARTH SCIENCES (GEOLOGY)

Geoscientific careers vary widely in required background. The Honours B.Sc. programme is designed with considerable choice in order that students may personalize their programmes based on career goals. Note that the flexibility afforded by this programme is not without limits. Some courses have prerequisites, and it is

ultimately the student's responsibility to ensure that these prerequisites are satisfied. Students should consult faculty members and the departmental Student Handbook for guidance in selecting courses appropriate to particular career paths.

In addition to the common block of required courses, the following courses must be completed to qualify for the Honours B.Sc. degree in Earth Sciences (Geology):

- d) Biology 2120 (or Biology 1001 & 1002).
- e) Earth Sciences 499A and 499B.
- f) Twelve additional Earth Sciences courses, of which at least six must be at 3000-level and at least four must be at 4000-level. Earth Sciences 2150, 2914, 2915 and 4310 cannot be used to fulfill this requirement.
- g) Four Science Faculty courses numbered 2000 or higher, no more than two of which may be Earth Sciences courses. Biology 3811 and Physics 2050 are excluded.
- h) Additional courses from departments in the Faculties of Arts or Science so as to achieve a total of 40 courses for the honours degree. Earth Sciences 2150, 2914 and 2915 are eligible additional courses. Mathematics 1080 and 1081; and Physics 1200, 1201 and 2050 are all excluded as additional courses; these courses can only be used to satisfy point (a) of the common block of required courses. Students are encouraged to complete a minor in another department.

HONOURS B.Sc. DEGREE IN EARTH SCIENCES (GEOPHYSICS)

- 1. In addition to the common block of required courses, the following courses must be completed to qualify for the Honours B.Sc. degree in Earth Sciences (Geophysics):
 - d) Mathematics 2050 and 3260; either Physics 3810 or Applied Mathematic/Pure Mathematics 3202; Physics 2054, 2055 and 3500.
 - e) Earth Sciences 3161, 3170, 3172, 4171, 4173, 4179, 499A, 499B.
 - f) Four additional Earth Sciences courses, of which at least two must be at 3000-level and at least one must be at 4000-level. Earth Sciences 2150, 2914, 2915 and 4310 cannot be used to fulfill this requirement.
 - g) Two Science Faculty courses numbered 2000 or higher. Biology 3811 and Physics 2050 are excluded.
 - h) Additional courses from departments in the Faculties of Arts or Science so as to achieve a total of 40 courses for the honours degree. Earth Sciences 2150, 2914 and 2915 are eligible additional courses. Mathematics 1080 and 1081; and Physics 1200, 1201 and 2050 are all excluded as additional courses; these courses can only be used to satisfy point (a) of the common block of required courses.

2. In accordance with Clause 6.i. of the Regulation of the Honours Degree of Bachelor of Science, Honours candidates must obtain a grade of "B" or better, OR an average of 75% or higher in the following courses beyond 1000-level: (i) the 16 Earth Sciences courses specified in point (b) of the common block of required courses and in points (e) and (f) above, and (ii) Physics 2054 and 2055.

GENERAL B.Sc. DEGREE IN EARTH SCIENCES (GEOLOGY)

In addition to the common block of required courses, the following courses must be completed to qualify for the General B.Sc. degree in Earth Sciences (Geology):

- d) Biology 2120 (or Biology 1001 & 1002).
- e) Nine additional Earth Sciences courses, of which at least five must be at 3000-level and at least three must be at 4000-level. Earth Sciences 2150, 2914, 2915 and 4310 cannot be used to fulfill this requirement.
- f) Four Science Faculty courses numbered 2000 or higher, no more than two of which may be Earth Sciences courses. Biology 3811 is excluded.
- g) Additional courses from departments in the Faculties of Arts or Science so as to achieve a total of 40 courses for the general degree. Earth Sciences 2150, 2914 and 2915 are eligible additional courses. Students are encouraged to complete a minor in another department.

Students are advised that this is the minimum requirement for the General B.Sc. in Earth Sciences (Geology). Many provinces, including Newfoundland and Labrador, have legislation requiring registration of professional geoscientists. A basic requirement for registration is, in most cases, the course equivalent of an Honours B.Sc. degree. Students intending to make a career in Earth Sciences should consider taking the Honours Degree programme of courses, regardless of whether honours standing is maintained.

GENERAL B.Sc. DEGREE IN EARTH SCIENCES (GEOPHYSICS)

In addition to the common block of required courses, the following courses must be completed to qualify for the General B.Sc. degree in Earth Sciences (Geophysics):

- d) Mathematics 2050; either Physics 3810 or Applied Mathematics/Pure Mathematics 3202; Physics 2054, 2055 and 3500.
- e) Earth Sciences 3161, 3170, 3172.
- f) Six additional Earth Sciences courses, of which at least three must be at 3000-level and at least one must be at 4000-level. Earth Sciences 2150, 2914, 2915 and 4310 cannot be used to fulfill this requirement.
- g) Additional courses from departments in the Faculties

of Arts or Science so as to achieve a total of 40 courses for the general degree. Earth Sciences 2150, 2914 and 2915 are eligible additional courses. Students are encouraged to complete a minor in another department.

Students are advised that this is the minimum requirement of the General B.Sc. in Earth Sciences (Geophysics). Many provinces, including Newfoundland and Labrador, have legislation requiring registration of professional geoscientists. A basic requirement for registration is, in most cases, the course equivalent of an Honours B.Sc. degree. Students intending to make a career in Earth Sciences should consider taking the Honours Degree programme of courses, regardless of whether honours standing is maintained.

TABLE OF CREDIT RESTRICTIONS FOR PRESENT EARTH SCIENCES COURSES WITH FORMER COURSES

Same as in the 1994-95 Calendar

GENERAL NOTES FOR ALL EARTH SCIENCES PROGRAMMES AND COURSES

*** Notes 1, 2, 3 and 5 are the same as in 1994-95 Calendar, p.199. ***

Change the last sentence of Note 4, p. 199, to the following: Additional field experience is provided by Earth Sciences 4905, which has prerequisites of Earth Sciences 3053 and 3400.

Add the following note after Note 5, p. 199:

6) Certain of the 4000-level courses may not be offered every year.

Following the course description for Earth Sciences 3053 amend prerequisites to read as follows:

"Prerequisites: Earth Sciences 2031 and Earth Sciences 2502 (or Chemistry 2300)."

Following the course description for Earth Sciences 3210 amend prerequisites to read as follows:

"Prerequisites: EITHER Earth Sciences 2031, 2310 and 2502; OR Earth Sciences 2031 and Chemistry 3211; OR Engineering 3610 and Engineering 3205."

Following the course description for Earth Sciences 3400 amend prerequisites to read as follows:

"Prerequisites: Earth Sciences 2310 (or Geography 2195 for declared joint Geography/Earth Sciences honours students)."

Following the course description for Earth Sciences 3600 amend prerequisites to read as follows:

"Prerequisites: EITHER Earth Sciences 2502; OR Earth Sciences 1000, Chemistry 2210 and Chemistry 2300."

Following the course description for Earth Sciences 4053 amend prerequisites to read as follows:

"Prerequisites: Earth Sciences 2503, 3053 and 3400."

Following the course description for Earth Sciences 4054 amend prerequisites to read as follows:

"Prerequisites: Earth Sciences 2503, 3053 and 3400."

Following the course description for Earth Sciences 4211 amend prerequisites to read as follows:

"Prerequisites: Earth Sciences 2503 and 3210."

Following the course description for Earth Sciences 4502 amend prerequisites to read as follows:

"Prerequisites: Earth Sciences 2503, 3053 and 3600."

Following the course description for Earth Sciences 4503 amend prerequisites to read as follows:

"Prerequisites: Earth Sciences 2503 and 3210."

Following the course description for Earth Sciences 4601 amend prerequisites to read as follows:

"Prerequisites: Earth Sciences 2502, 3701 and 3170 (or 3172)."

Following the course description for Earth Sciences 4610 amend prerequisites to read as follows:

"Prerequisites: Earth Sciences 2502 or permission of instructor."

Following the course description for Earth Sciences 4905 amend prerequisites to read as follows:

"Prerequisites: Earth Sciences 3053 and 3400."

Following the course description for Earth Sciences 2503 delete the words "high" and "low-temperature".

Page 180, following the heading Regulations for the Honours Degree of Bachelor of Science 2b.i. insert the following new note:

"4) For the Earth Sciences (Geophysics) Programme, the twenty courses will consist of 18 Earth Sciences courses, Physics 2054 and Physics 2055."

Page 134, 1994-95 Calendar, following the heading Major in Geography (B.A. or B.Sc.) amend final paragraph to read as follows:

"B.Sc. candidates must complete credits from other Science disciplines as follows:

- a) Mathematics 1000, or 1050 and 1051, or 1080 and 1081
- b) four credits as specified from not more than two of the following disciplines:

Physics 1200 and 1201, or 1050 and 1052

Chemistry 1000 and 1001, or equivalents

Biology 1001 and 1002

Earth Sciences 1000 and 1001

Psychology 1000 and 1001

Note: Computer Science 1700 may be substituted for one of the required four credits.

- c) five further Science credits outside Geography at the 2000-level or above"

Page 135, following the heading Honours in Geography (B.A. or B.Sc.), clause 2.c) amend to read as follows:

"c) complete at least 20 credits in Geography which must include

- i) the 15 courses as listed under Major in Geography described above
- ii) Geography 3230, 4990 and 4999
- iii) two additional Geography credits at the 4000-level"

Delete clause 2.d).

37.40 Department of Physics

Page 209, 1994-95 Calendar, delete the current entry Honours in Physics and replace with the following:

"Honours in Physics

The following courses are prescribed:

- a) English 1080 and English 1110 (or equivalent).
- b) Chemistry 1000 and 1001.
- c) Mathematics 1000 (or 1080 and 1081) and 1001.
- d) Mathematics 2000, 2001, 2050 and AM/PM 3260.
- e) Computer Science 3731.
- f) Physics 1050 and 1052 (or 1200, 1201, and 2050).
- g) Physics 2053, 2054, 2055, 2056, 3220, 3230, 3400, 3410, 3500, 3550, 3600, 3750, 3751, 3820, 3821, 3900, 3920, 4500, 4850, 490A/B.
- h) Physics 3810 or AM/PM 3202.
- i) One of Physics 4200, 4205, 4210, 4820.

- j) One of Physics 4000, 4600, 4710, 4851.
- k) Three applicable elective courses*

Note: Certain of the graduate courses may be taken in the final year of the Honours Programme with the permission of the Head of the Department.

*It is possible to complete the Honours Physics programme in 40 courses only if Physics 1050, Chemistry 1000, and Mathematics 1000 are taken as the first course in each subject. Chemistry 1800, Mathematics 1080 and 1081, and Physics 1200, 1201 and 2050 may not be used as elective courses in the 40 courses in the 40 Honours program under k) above. Inclusion of Chemistry 1800, substitution of Mathematics 1080 and 1081 for Mathematics 1000, or substitution of Physics 1200, 1201, and 2050 for Physics 1050 and 1052 will each increase the number of courses required for the Honours Physics programme by one.

An Honours thesis is to be presented on work undertaken by the candidate under the guidance of a Department of Physics faculty member. The thesis comprises the two credit course Physics 490A/B. Students should seek advice regarding a thesis project no later than the winter preceding the semester in which the project will be started.

The Honours Physics programme in and beyond the third year requires a familiarity with computer programming. In choosing electives for this programme, students should note that the prerequisites for Computer Science 3731 include Computer Science 2602 or Computer Science 2710 or permission of the Head of Computer Science.

A suggested course schedule for Honours Physics is given below. This schedule is intended for students who qualify for Physics 1050 and 1052. Other suggested course schedules are available from the Head of the Department.

Year	Semester I	Semester II
I	English 1100 Chemistry 1000 Mathematics 1000 Physics 1050 Elective	English 1110 (1101, 1102) Chemistry 1001 Mathematics 1001 Physics 1052 Elective
II	Mathematics 2000 Mathematics 2050 Physics 2053 Physics 2054 Elective	Mathematics 2001 AM/PM 3260 Physics 2055 Physics 2056 Physics 3810
III	Physics 3220 Physics 3400 Physics 3550 Physics 3600 Physics 3820	Physics 3230 Physics 3750 Physics 3500 Physics 3900 Physics 3821

IV	Physics 3751	Physics 3410
	Physics 4500	Physics 3920
	Physics 490A	Physics 490B
	Physics 4850	Physics Elective
	Computer Science 3721	Physics Elective"

38.41 Department of Psychology

Page 212, 1994-95 Calendar, following the heading Requirements for a Major in Behavioural Neuroscience (B.Sc. Only), clause 1.d) amend to read as follows:

"d) Two laboratory courses chosen from two different areas from the following:

- Development: 3050 or 3051
- Social: 2160 or 3100
- Learning: 2250
- Perception: 2360
- Cognition: 2450 or 3450
- Personality & Abnormal: 2620 or 3650
- Animal Behaviour: 3750 or 4701"

Amend the word "Five" in clause 3 to read as follows:

"Six".

Following the heading Requirements for Honours in Behavioural Neuroscience (B.Sc. Only) replace clause 1.a) and b) to read as follows:

"1. Honours students shall complete the 30 courses required for a Major in Behavioural Neuroscience and the following:

- Psychology 3900, 499A, and 499B."

37.42 Department of Mathematics Forty Course Honours Programme

A memorandum dated December 21, 1994, from the Department of Mathematics and Statistics regarding a forty course honours programme, for the department was received for information.

37.43 *Proposal for New Baccalaureate Degree: Bachelor of Maritime Studies

New Degree Programme

"BACHELOR OF MARITIME STUDIES

The Bachelor of Maritime Studies degree is a professional degree designed to educate and train students who will initially proceed to careers in the marine transportation industry. The program is developed to provide a fundamental technical component which fulfils licensing requirements for seagoing personnel coupled with a broader academic component exposing the student to contemporary

organizational and human resource management theory and practice as well as providing an insight into economics and social sciences in the global context.

The student's academic and technical education is interspersed with periods of seagoing experience. The graduate of the intensive program is well positioned for a career in today's marine transportation industry.

The degree program is structured to provide two entry options. Students can proceed straight through the program from initial entry. The design of the program with a basic first year component, a technical component, and an enrichment component facilitates entry into the program with advanced standing for those who have completed a diploma at the Marine Institute or some other maritime academy.

1. Admission Requirements

- (a) Applicants without any formal post-secondary education must meet the regular admission requirement of the Marine Institute or the University.
- (b) Applicants holding a diploma from the Marine Institute in Nautical Science or Marine Engineering Technology awarded after 1993 will be awarded the degree upon satisfactory completion of the additional courses section of the degree regulations.
- (c) Applicants holding a diploma similar to the Marine Institute diploma in Nautical Science or Marine Engineering Technology will have their status adjudicated relative to the Marine Institute diploma requirements in the appropriate area. Appropriate exemptions will be granted and a course of study developed.
- (d) Applicants who have Canadian Coast Guard, or equivalent, challenge credits will have their status adjudicated relative to the Marine Institute diploma requirements in the appropriate areas. Appropriate exemptions will be granted and a course of study developed.

General Notes

1. The diploma program is an intensive and demanding program of study. Students in the program are expected to be enrolled for full time study and withdrawal from a course may jeopardize the student's ability to complete the program in the normally allocated time.
2. All courses designated Technical Courses in the program are restricted to students enrolled in the Maritime Studies program.

3. Where circumstances warrant prerequisites in the Technical Courses may be waived by the Head, School of Maritime Studies.
4. Specific regulations for the program may be waived upon approval by the Marine Institute Undergraduate committee on recommendation of the Head, School of Maritime Studies.

DEGREE REGULATIONS

1. To be awarded a degree of Bachelor of Maritime Studies a candidate shall successfully complete the following courses in (a) and (b) (i) or (ii), which comprise the Diploma in Nautical Science or Diploma in Marine Engineering Technology respectively, plus the courses specified in (c):

- (a) Mathematics MI 1100,1101, 1200:
Physics MI 1100, 1200:
Chemistry MI 1100, 1200;
Electrotechnology 1100,1200
Communication Skills 1100, 1200,
Computer Applications 1100
Engineering Graphics 1100

- (b) Technical Courses
EITHER
(i) Nautical Science

Seamanship 1100, 2100, 2200, 2300, 3100
Ship Operations 1100
Cargo and Navigation 1100
Naval Arch. 2102, 2202
Oceanology 2100, 2101, 2200, 3100
Navigation 2100, 2200, 2300, 3100, 3200
Problem Solving 2100
Cargo Operations 2100, 3100
Marine Engineering Knowledge 2102, 2202, 3102
BOM 2102, 3103, 3104, 3106, 3108, 3203
Business 1000, 2301
Stability 2101, 3101, 3201
Navigation Safety 3101
Mathematics 2102
In addition to these, students must complete SEN 3100, the GMDSS course, the Tanker Safety Course and the MED programs.

OR

- (ii) Marine Engineering Technology

Engineering Drawing 1100
Engineering Graphics 2300
Electrotechnology 2100, 3100
Materials/Processes 2100, 2200
Mechanics of Machines 2100, 2200

Marine Engineering Knowledge 1100, 2100, 2200,
3100,3200
Thermodynamics 2100, 2200, 3102, 3101
Fluid Mechanics 2100, 3100
Controls 2102, 2202
Naval Architecture 2101, 3100, 3200
Strength of Materials 2100, 3100
Workshop Practice 1103, 1104, 1105, 2103, 2105, 3103,
3203, 3104
Maintenance 2103
Marine Environmental Stewardship 3106
Engineering Management 3100
BOM 2102
Technical Thesis 3100
Business 1000
Business 2301

Note that there is also a requirement for MED training
and this too, must be completed before the Diploma in
Marine Engineering Technology will be awarded.

- c) Plus the following additional courses to meet degree
requirements.

2 courses in first year English (1080 and 1110 are
recommended);
Economics 2010, 2020;
One of Political Science 3210 or Business 4000
One of Geography 3510 or Geography 3400 or History
3690 or Anthropology 3056;
One of Business 4320 or Psychology 3501;
Engineering 8065;
Mathematics 2500;
Business 3320;
Technical Report Project (TR 4000);
2 Electives from the list shown below

Elective List

Mathematics 2501;
Business 1101;
Business 1201;
Business 4000;
Economics 3030;
Sociology 2120;
One of Sociology/Anthropology 3317, or S/A 4091 or S/A
4108;
Political Science 3210 (PS 2200 recommended
introduction);
Political Science 4200;

One of Psychology 2120 or Sociology 3120;
Business 6320 or Economics 4360;
Engineering 4102

Note:

1. Course descriptions for the Marine Institute

courses may be found in the Marine Institute Calendar. Descriptions for courses elsewhere in the University may be found in appropriate sections of the university calendar.

2. In addition to the specific course requirements above, students must complete the Marine Emergency Duties I and II. These are taken during the first and second Technical Sessions in preparation for the seagoing work experience.
3. The diploma program is organized around a very tight schedule of courses to which students should adhere. The program involves an academic First Year of two semesters followed by a Technical Session of 8 weeks after which the student undertakes a seagoing assignment of three months. The two programs also require additional seagoing experience.

Technical Report Project (TR 4000)

This report, which must be completed in the final term of studies, is designed to tie together the final year of the program with the technical component dealt with in earlier semesters. It gives the student the opportunity to carry out an in-depth study into some particular aspect of the maritime milieu involving such areas as safety, management, national and international regulation, sea-survival or any number of topics involving the business of shipping. The report will be written under the supervision of a faculty member within the School of Maritime Studies and agreement must be reached with a particular faculty member before the study is undertaken."

Following approval of the Bachelor of Maritime Studies degree programme, Mr. O'Reilly commented that this was an historic evening for the Marine Institute in that it is barely three years since the union of the institution with Memorial. He stated that he has been delighted with the support that has been received from the Senior Executive and the Deans and Directors at Memorial in developing the Marine Institute's first undergraduate degree programme. On behalf of the Faculty, staff and the Advisory Board of the Marine Institute he thanked the University for supporting the new programme.

37.44 Faculty of Education

Page 228, 1994-95 Calendar, following the heading Regulations for the Degree of Bachelor of Special Education, Admission Requirements amend clause 4 to read as follows:

"4. Students pursuing or having completed degree programmes for the preparation of secondary school teachers who wish to enter the Bachelor of Special Education Degree

Programme shall complete Education 4242, one of Education 3220, 3230 or 4240, and one of Education 4350 or 4352."

Page 225, following the heading Regulations for the Degree of Bachelor of Education (Secondary), clause 3.b) (iv) add the following note:

"Note: Students intending to apply to the Bachelor of Special Education Degree Programme should complete Education 4240, 4242, and one of 4350 or 4352."

Page 235, amend course description of Education 3620 to read as follows:

"3620. Behaviour Problems of Children and Adolescent: Nature and Characteristics (P,E,H). This course will include an examination of procedures for the early identification of children with behavioural disabilities and major systems of classification of behaviour problems. It will also include an analysis of: aberrant adjustment mechanisms, deviant development and specified behaviour problems with implication for therapeutic education. Prerequisite: Education 3220 or 3230, or 4240".

Page 242, following the heading Courses in Special Education delete course description of Education 3620 and replace with the following:

"(See course description in Education course section). Acceptance to the programme is not required to enrol in this course."

Page 236, amend course description of Education 3802 to read as follows:

"3802. Education Media II (P,E,H). This laboratory course involves theories of communication, philosophy of educational media and advanced local production of instructional materials. Prerequisite: Education 3801 or Education 3480".

37.45 Faculty of Business Administration

Page 75, Senate minutes of January 10, 1995, following course description of Business 3401 amend prerequisite to read as follows:

"Prerequisites: Statistics 2500 and Business 2401".

Page 335, 1994-95 Calendar, following the heading The Curriculum, clause 3 amend item b) to read as follows:

"b) One course in Statistics".

Amend item d) to read as follows:

"d) Seventeen core courses in Business Administration".

2401. Quantitative Methods for Business. Topics will include series, probability, introduction to simulation, linear algebra, graphing (including two-variable linear optimization), and business applications of differential calculus; where applicable, spreadsheets will be used.
Prerequisite: Mathematics 1000 or 1081
Prerequisite or Corequisite: Computer Science 2801

7610. Regulatory and Taxation Issues for Small Business. This course is designed to provide students with a general knowledge base of the various tax and other regulatory issues that should be considered in starting a business. The role that tax plays in decision making will be examined as well as the types of corporate funding to establish a new business through government grants, conventional loans and tax credits as provided under the Income Tax Act. Alternative corporate structures will be examined as well as aspects re employee compensation and business valuations. Practical aspects of starting your own business, such as registration requirements, will also be examined.
Prerequisite: Business 1101

Page 335, following the heading Examination and Advancement amend clause 8 to read as follows:

"8. The overall evaluation of the work period is the responsibility of Business Co-operative Education. The work period shall consist of two components:

Student performance as evaluated by a co-ordinator, given input from the employer, and a work report graded by a co-ordinator or a member of faculty.

Evaluation of the work term will result in the assignment of one of the following final grades:

- a) Pass with Distinction: Indicates EXCELLENT PERFORMANCE in BOTH the work report and work performance. The student is commended for his/her outstanding performance in each of the required components; pass with distinction has been awarded to each of the work report and work performance.
- b) Pass: Indicates that PERFORMANCE MEETS EXPECTATIONS in both the work report and work performance. The student fully meets the requirements of a passing work report and completely satisfactory work term performance.
- c) Fail: Indicated FAILING PERFORMANCE in either or both the work report and the work performance.

For promotion from the work period, a student must obtain PASS WITH DISTINCTION or PASS."

Page 145, Senate minutes of March 1, 1994, amend clause 2b Evaluation and Promotion to read as follows:

"b) Student attendance is required at all seminar and laboratory classes, Studentship sessions and Clerkship sessions as indicated in the Course Descriptions. Classes or sessions that are missed will be excused only for medical/compassionate reasons, which will require suitable documentation. Students so excused are responsible for obtaining the material they missed. Failure to comply with these requirements may result in the student receiving a failing grade in the course."

Page 293, 1994-95 Calendar, following the heading Courses in the First Year of Pharmacy Studies amend course descriptions as follows:

"Pharmacy 3004. Professional Practice (W): Application of pharmacy regulations in the dispensing of medications. Pharmacy record keeping using computerized and manual systems. Dispensing of proprietary and extemporaneous prescriptions. Usage of drug delivery systems and devices. Lecture: One hour per week. Laboratory: Two hours per week. Attendance is required. Note: The passing grade in Pharmacy 3004 Professional Practice is 70%, failing which the student may be required to withdraw.

Pharmacy 3005. Pharmaceutical Preparations (W): An introduction to the theory and formulation of pharmaceutical dosage forms as they apply to pharmacy practice. The laboratory consists of exercises in compounding representative examples of the various types of preparations studied in the classroom. Examples of calculations employed in pharmacy are studied where appropriate. Lectures: Three hours per week. Laboratory: Three hours per week. Attendance is required.

Pharmacy 300W. Studentship (S): Non-credit course. Practical training in a pharmacy after classes and examinations in the Winter Semester have ended. Prerequisites: All courses required in the Fall and Winter Semesters of the First Year. Twelve weeks, 35 hours per week. Attendance is required.

Pharmacy 3011. Orientation to Pharmacy (F): An introduction to the history, organization and the role of Pharmacy in the health care system. Special emphasis will be given to the federal and provincial regulations which govern the practice of pharmacy. The relationship between law and ethics will also be discussed. The laboratory consists of computer applications as they pertain to pharmacy practice. Lectures: Two hours per week. Laboratory: Three hours per week. Attendance is required.

Pharmacy 3101. Human Anatomy (F): Cell biology, histology and gross anatomy including lymphoid, nervous, respiratory, digestive, reproduction, renal and endocrine systems. The laboratory consists of slide demonstrations of certain systems.

Lectures: Three hours per week.

Laboratory: Four two-hour laboratories. Attendance as required by the instructor."

Delete the course Pharmacy 3104.

Revised course descriptions

Biochemistry 3200. Basic Human Nutrition I: A study of the nutrients essential to human health and well-being, with emphasis on carbohydrates, proteins and lipids - chemistry, dietary source, dietary requirements, metabolism, physiological importance.

Corequisite: Pharmacy 3110.

Lectures: Three hours per week.

Chemistry 3100. Analytical Chemistry I (W): Treatment of data, gravimetric analysis, volumetric analysis including oxidation-reduction titrations using electrochemical techniques, the use of specific ion electrodes, and titrations in non-aqueous systems. Spectrophotometric trace analysis and titration.

Prerequisite: Chemistry 2300.

Lectures and Laboratories: Not more than seven hours per week.

Attendance at laboratories is required.

Medicine 310A/B. Human Physiology (F)(W): Topics covered are the properties of nerves and muscle cells, the nervous system, the special senses, blood and body fluids, the cardiovascular system, digestion, respiration, renal function, endocrinology and reproduction. Integration of the body's systems in maintaining homeostasis will be emphasized.

Prerequisites or Corequisite: Pharmacy 3110. Permission of Instructor or Associate Dean of Basic Sciences for students other than Biochemistry Majors.

Lectures: Three hours per week.

Laboratory: Up to three hours per week.

Page 293, following the heading Courses in the First Year of Pharmacy Studies add the following note:

"NOTE: WHERE SPECIFIC PREREQUISITES ARE NOT GIVEN, THE COURSES NORMALLY TAKEN TO MEET THE ELIGIBILITY REQUIREMENTS FOR ADMISSION WILL PROVIDE ANY NECESSARY PREREQUISITES."

Page 294, following the heading Courses in the Second Year of Pharmacy Studies amend as follows:

Delete course Pharmacy 400A/B and replace with the following:.

"Pharmacy 4010. Medicinal Chemistry I (F): The structures, selected chemical and physical properties, mechanisms of action, and structure-activity relationships of drugs other than chemotherapeutic agents. Theoretical aspects of drug design and drug metabolism. Medicinal agents of plant origin and inorganic pharmaceuticals are also included.

Lectures: Three hours per week.

Pharmacy 4011. Medicinal Chemistry II (W): The structures, selected chemical and physical properties, mechanisms of action, and structure-activity relationships of drugs other than chemotherapeutic agents. Theoretical aspects of drug design and drug metabolism. Medicinal agents of plant origin and inorganic pharmaceuticals are also included.

Prerequisite: Pharmacy 4010.

Lectures: Three hours per week."

Revised course descriptions

Pharmacy 4002. Physical Pharmacy (F): The physical chemistry of pharmaceutical dosage forms. Factors which influence the design and efficacy of pharmaceutical formulations. Physical chemistry and properties of solutions, solids, emulsions, ointments, suspensions.

Lectures: Three hours per week.

Laboratory: Three hours per week. Attendance is required.

Pharmacy 4003. Pharmacy Administration (W): Management principles useful in operating a pharmacy. General concepts of pharmaceutical marketing and an examination of how health care is provided.

Prerequisite: Business 1000.

Lectures: One hour per week.

Pharmacy 4006. Applied Pharmacokinetics (W): Introduction to biopharmaceutical and pharmacokinetic principles useful in the selection, monitoring and evaluation of drug therapy. Application of these principles in evaluating drug literature and developing drug dosage regimens of selected classes of drugs for individual patients.

Prerequisite: Pharmacy 4002.

Lectures: Three hours per week.

Laboratory: Three hours per week. Attendance is required.

Pharmacy 4009. Pharmacology (W): This course will follow Medicine 4300 and will consist of lectures and laboratory demonstrations designed to explore in depth topics in general pharmacology. Topics will include: drugs affecting the central nervous system, endocrine pharmacology, chemotherapy, anti-coagulants, diuretics, bronchodilators and anti-inflammatory drugs.

Prerequisite: Medicine 4300

Lectures: Three hours per week.
Laboratory Hours: Up to three hours per week. Attendance is required.

Pharmacy 401W (F). Non-credit course: Seminars in Pharmaceutical Sciences. Presentations by faculty and visiting scientists on topics of current importance. The final grade, Pass or Fail, will be based on attendance and participation. Attendance is required.
Note: This course is a necessary prerequisite for Pharmacy 402W (W).

Pharmacy 402W (W). Non-credit course: Seminars in Pharmaceutical Sciences. Presentations by faculty and visiting scientists on topics of current importance. The final grade, Pass or Fail, will be based on attendance and participation. Attendance is required.
Note: This course is a necessary prerequisite for Pharmacy 501W (F).

Pharmacy 410W. Studentship (S): Non-credit course. Practical training in a pharmacy after classes and examinations in the Winter Session have ended.
Prerequisite: All courses required in the Fall and Winter Semesters of the Second Year.
Twelve weeks: 35 hours per week. Attendance is required.

Biochemistry 3201. Basic Human Nutrition II: A study of the vitamins, minerals and trace elements essential to human health and well being - chemistry, dietary source, dietary requirements, physiological role, deficiency syndromes.
Prerequisite: Biochemistry 3200.
Corequisite: Pharmacy 3111.
Lectures: Three hours per week.

Business 1000. Introduction to Business: An overview of business in the Canadian environment is presented in the course with emphasis on the stakeholders involved and the issues confronting managers. The course examines the functional areas of the enterprise (finance, marketing, production, and human resources management) in addition to providing an overview of the business system. An analysis of actual business situations provides a framework of study.
Note: Credit may not be obtained for both Business 2001 and Business 1000.

Medicine 4300. Introduction to General and Autonomic Pharmacology (F): This course will deal with the general principles of pharmacology (receptors, absorption, distribution, metabolism, pharmacokinetics), drugs affecting peripheral nerve transmission, the central nervous system and the cardiovascular system.
Prerequisite: Medicine 310A/B.
Lectures: Three hours per week.
Laboratory: Three laboratories of three hours each.

Attendance is required.

Page 294, following the heading Courses in the Second Year of Pharmacy Studies add the following note:

"NOTE: WHERE SPECIFIC PREREQUISITES ARE NOT GIVEN, THE COURSE NORMALLY TAKEN TO MEET THE REQUIREMENTS FOR PROMOTION FROM FIRST TO SECOND YEAR WILL PROVIDE ANY NECESSARY PREREQUISITES."

Page 294, following the heading Courses in the Third Year of Pharmacy Studies amend the following course descriptions:

"Pharmacy 502X (5 credit course): Consists of courses 5001, 5003, 5004, 5005, 5008, 5009 and 5017 described below. The grade for 502X will be the weighted average of those for the constituent courses. The weighting factor, per course, will be the number of lecture hours for that course divided by the total number of lecture hours for all courses. To obtain credit for 502X, a student must pass all the constituent courses and obtain a weighted average of not less than 65%.

Amend course number and description of Pharmacy 5009 to read as follows:

"Pharmacy 5009: Pharmacoepidemiology (F): This course will cover 1) the principles of epidemiology and its application in public health and the health services delivery system, 2) methods used in pharmacoepidemiologic studies, 3) the use of pharmacoepidemiology studies to study the benefit risk and effectiveness of drugs, and 4) the use of clinical trials to establish the efficacy of new drugs.
Lectures: Two hours per week."

Amend course descriptions of the following courses:

"Pharmacy 5008. Radiopharmacy (F): An introductory course which discusses both radiopharmaceuticals and nuclear pharmacy practice. The design of the radiopharmaceutical is developed followed by a description of the chemistry and clinical uses of the individual drugs. A laboratory section emphasizes those operations which will enable the pharmacist to meet basic contemporary practice situation.
Lectures: Twelve hours.
Laboratory: Six hours. Attendance is required.

Pharmacy 500X. Clinical Clerkship (W): (5 credit course). Provides experience in clinical practice. The student will participate as a member of a patient care team and will have supervised responsibilities. Students will be required to do inservices, attend work rounds and complete a written exam at the completion of the course. Emphasis will be placed on the therapeutics of general medicine, infectious disease, pharmacokinetics and cardiology.
Prerequisite: Pharmacy 502X

Two six modules, 35 hours per week. Attendance is required.

Pharmacy 501W. Non-credit course (F): Seminars in Pharmaceutical Sciences. Presentations by faculty and visiting scientists on topics of current importance. The final grade, Pass or Fail will be based on attendance and participation. Attendance is required.

Pharmacy 5017. Pharmaceutical Technology (F): The principles of development and evaluation of novel delivery systems for drugs including therapeutic proteins and peptides. The course objectives are to provide knowledge of the physiochemical and biopharmaceutical aspects of the design, use and evaluation of novel drug delivery systems with emphasis on controlled release systems for oral and percutaneous delivery.

Lectures: Three hours per week.

Laboratory: Up to three hours per week. Attendance is required.

Note: Credit may not be obtained for Pharmacy 5017 and the former Pharmacy 5007."

Following the heading Courses in the Third Year of Pharmacy Studies add the following note:

"NOTE: WHERE SPECIFIC PREREQUISITES ARE NOT GIVEN, THE COURSES NORMALLY TAKEN TO MEET THE REQUIREMENTS FOR PROMOTION FROM SECOND TO THIRD YEAR WILL PROVIDE ANY NECESSARY PREREQUISITES."

37.47 Faculty of Engineering and Applied Science

Page 313, 1994-95 Calendar, following the heading Programme of Study, after paragraph five insert the following:

"There is an "Engineering Profession Seminar" which is a three hour seminar offered in the fall term to Term I students. Issues include, but are not limited to: professional practice, gender issues, bearing of the Association of Professional Engineers and Geoscientists of Newfoundland code of ethics on students' behaviour."

37.48 School of Physical Education and Athletics - Regulations Governing Attendance and Neglect of Studies

Following the heading Activity Courses, insert the following:

"Attendance is required in PHSD 2210, 2220, 3210, 3220, 4210, 4220.

Students who are absent for more than six class hours in any of these courses may be required to withdraw from the remainder of the course. Students required to withdraw from a course for failure to comply with attendance

regulations will receive a grade of 0 F."

37.49 Academic Advising Centre

Page 55, 1994-95 Calendar, insert the following after the heading Admission to the University but before the heading General Academic Regulations (Undergraduate):

"ACADEMIC ADVISING

During their period of study at the University, students are expected to make some very important academic decisions, the consequences of which can significantly affect the course of their academic careers. While the responsibility for making these decisions rests with students individually, they are not expected to make such decisions without access to sound academic advice.

Students should seek advice on matters such as course selection, telephone registration, dropping/adding course registrations, selecting/changing an academic programme, entrance requirements for degree programmes and interpretation of university regulations. It is especially true that students in the early stages of their degree programme should seek academic advice.

Academic Advising Centre

Students who are considering enrolling at the University or who are in their first year of study at the University or who have not declared an academic programme can obtain academic advice. Those students attending the St. John's Campus or the Regional College campuses should contact the Academic Advising Centre, Office of the Registrar, located in the Science Building room S4053, at 737-8801. Those students attending the Sir Wilfred Grenfell College campus should contact the Senior College Academic Adviser at the Office of the Registrar, located in the Arts and Science Building in room AS270, at 637-6298.

Students who have declared their major or have been accepted to a School or Faculty can obtain academic advice from a faculty adviser assigned by their School/Faculty/Department. Students should contact the head of the relevant academic unit to be assigned a faculty adviser.

Students are also encouraged to approach their professors for academic advice or referral to the appropriate source of advice.

While it is the responsibility of students to see that their academic programmes meet regulations in all respects, academic advice is provided as a service of the University."

37.50 Attendance at Classes, Laboratories or other Educational Activities while an Appeal is in Progress

Page 56, 1994-95 Calendar, following the heading C. Appeals Procedures add new note 1 to read as follows:

"Students who wish to attend classes, laboratories or other educational activities while an appeal is in progress can do so only with the written permission of the academic unit concerned. This provision excludes students charged with an offence under the CODE OF DISCIPLINARY PROCEDURES FOR STUDENTS."

37.51 General Regulations F. Classification of Degrees and S. Regulations for Examinations and Evaluations

Page 57, following the heading F.(2) Classification of Degrees amend to read as follows:

"F.(2) CLASSIFICATION OF DEGREES

The following Degrees are not classified: Bachelor of Engineering, Bachelor of Medical Science and Doctor of Medicine, Bachelor of Education (Secondary), Bachelor of Special Education, Bachelor of Music Education, Bachelor of Vocational Education (as a second degree), Bachelor of Education (as a second degree), and Bachelor of Maritime Studies. No candidate can be awarded a degree, diploma or certificate unless and until he or she has obtained an average of at least 1 point on the total number of courses required for such degree, diploma or certificate. Points are awarded for each course as follows except in the case of linked courses (see Section A Clause 2.(b)i. of the General Academic Regulations):

Note: The degree of Doctor of Medicine is not included in this requirement since all courses comprising the degree are evaluated on a PAS/FAL basis.

Grade A	80, 85, 90, 95, 100%	3 points
Grade B	65, 70, 75%	2 points
Grade C	55, 60%	1 point
Grade D	50%	0 points
Grade F	45% and below, or failure to complete a course without acceptable cause.	

NOTE: While a pass is recorded for Grade D result, no points are given. Thus, any passes in this grade must be compensated for by sufficient passes in the higher grades to earn the required points.

1. General degrees are awarded in three classes based on the system for granting points set forth above, and determined as follows:
 - a) A candidate who obtains an average of 2.5 points or better on the total number of courses required for the

degree shall be awarded the degree with First-Class Standing provided that all other degree requirements are met.

- b) A candidate who fails to obtain First-Class Standing but who obtains an average of 1.75 points or better on the total number of courses required for the degree shall be awarded the degree with Second-Class Standing provided that all other degree requirements are met.
- c) All other candidates will be awarded the degree with Third-Class Standing, provided that they obtain an average of 1 point or better on the total number of courses required for the degree provided that all other degree requirements are met.

2. For regulations governing classification of Honours Degrees, see that section of the University Calendar dealing with the Regulations for the Honours Degree of Bachelor of Arts, Regulations for the Honours Degree of Bachelor of Science, or Regulations for the Honours Degree of Bachelor of Commerce (Co-operative).

3. In addition to Clauses 1 and 2 above, candidates shall also comply with such additional regulations as may be required by the College/Faculty/School/Institute offering the Programme. See appropriate degree Regulations.

4. Where a candidate obtains credit for more courses than are required for the degree, his or her total points shall include only those received for the courses

required.

In eliminating from the total points those received for courses beyond the requirements of the degree, the

course

or courses for which the candidate receives the fewest points shall be disregarded, provided that no course is disregarded that is a requisite for the degree.

5. Where a candidate receives more than one classified Bachelor's degree, the class of each degree will be determined independently by the application of Clauses 1--3 above, provided that in determining the points total for each degree only those courses may be counted which give credit towards the degree concerned.

6. A candidate who has been granted credit for courses completed at this University before September 1959, or one who has been given credit for courses completed at another university, will have the class of his or her degree determined by applying the scheme set forth in 1 and 2 above in proportion to the total of required courses completed at this University since September 1959. No classification will be given to the degree awarded a candidate who has completed fewer than

one-half of the courses required for the degree at this University, or who has completed fewer than one-half of the courses required for the degree at this University since 1959. All such candidates shall, however, obtain an average of 1 point or better on the total number of the courses required for the degree taken at this University since September 1959 in order to qualify for the degree."

Following the heading Regulations for Examinations and Evaluations amend to read as follows:

"S. REGULATIONS FOR EXAMINATIONS AND EVALUATIONS

These regulations shall apply to undergraduate examinations:

1. The method of evaluation in any course shall be determined by the Department or the appropriate administrative equivalent concerned, subject to any College/Faculty/School/Institute or General University Regulations.
2. The method of evaluation and required prerequisites or corequisites shall be made known to students before the end of the first week of lectures in any semester or session. This information shall be in typewritten or computer-generated format and made available to the students present in each class during the first week of lectures.
3. When, in the judgment of the instructor, a student persistently fails to display a reasonable standard of literacy, the instructor may consider this as detracting from the quality of the student's work in the course when assigning a final mark or grade.
4. Final examinations, if any, whether of the normal two-hour duration or longer, shall be held in each course at the end of the semester during which it was given in accordance with the schedule of examinations published by the Registrar.

Note: Application of this clause to the Bachelor of Education (Secondary) Programme is subject to interpretation by the Undergraduate Studies Committee, Faculty of Education.

5. The academic standing of each student in his or her first semester will be based upon the courses for which he or she was registered as of seven weeks following the first day of lectures in any semester.

The academic standing of each student beyond his or her first semester will be based upon the courses for which he or she was registered as of five weeks following the first day of lectures in any semester.

6. a) i. No laboratory examinations or tests totalling more than one laboratory period in length shall be given in any course in any week during a lecturing period in any semester or session. Such examinations or tests shall be administered in the laboratory time slot assigned for that course section.
- ii. Any other examinations or tests shall not extend beyond the time slot assigned to that course section in any week.
- b) During the last two weeks of the lecturing period in any semester or the last week of the lecturing period in any session, no tests, examinations or assignments, whether in-class or take home, shall be administered or assigned. However, assignments, projects or term papers assigned earlier in the term and notified under S.1 and S.2 may be submitted and oral and laboratory examinations may be administered.
- c) No examinations or tests of any nature shall be held between the last day of lectures and the start of the formal examination period in any semester or session.

NOTE: The application of Clause 6 to the Faculty of Medicine, Clause 6(a) to the Faculty of Engineering and Applied Science, and Clauses 6(b) and (c) to the School of Nursing is subject to interpretation by the appropriate Faculty Committee on Undergraduate Studies.

NOTE: The Senate Committee on Undergraduate Studies may grant a waiver of Clause 6(a) for examinations or tests in individual courses in a given term upon recommendation of the Faculty/School/College/Institute Committee on Undergraduate Studies. Such waivers will be considered only if it can be shown that such examinations or tests do not conflict with regularly scheduled sessions of another course for any student involved.

NOTE: In the event of an officially declared emergency which results in the cancellation or interruption of in-class examinations or tests previously scheduled and notified to be held in the final lecture period of the third last week of lectures of a semester or the second last week of lectures of a session, teaching units may reschedule such tests or examinations in the next regularly scheduled class or as early as possible in the second last week of lectures of a semester or the last week of lectures of a session. In no circumstances can the rescheduled tests or examinations be held in the last week of lectures of a semester.

7. The final evaluation submitted to the Registrar shall consist of one of the following letter grades with the appropriate numerical equivalent:

A 80, 85, 90, 95, or 100%
B 65, 70, or 75%
C 55 or 60%
D 50%
F below 50%
Inc. Incomplete
Pas. Pass
Fal. Fail

Description of Grades

"A" indicates EXCELLENT PERFORMANCE with clear evidence of

- a comprehensive knowledge of the subject matter and principles treated in the course
- a high degree of originality and independence of thought
- a superior ability to organize and analyze ideas and
- an outstanding ability to communicate

"B" indicates GOOD PERFORMANCE with evidence of

- a substantial knowledge of the subject matter
- a moderate degree of originality and independence of thought
- a good ability to organize and analyze ideas and
- an ability to communicate clearly and fluently.

"C" indicates SATISFACTORY PERFORMANCE with evidence of

- an acceptable grasp of the subject matter
- some ability to organize and analyze ideas and
- ability to communicate adequately

"D" indicates MINIMALLY ACCEPTABLE PERFORMANCE with evidence of

- rudimentary knowledge of the subject matter
- some evidence that organizational and analytical skills have been developed, but with significant weaknesses in some areas, and
- significant weakness in the ability to communicate

"F" indicates FAILING PERFORMANCE with evidence of

- an inadequate knowledge of the subject matter
- failure to complete required work.
- inability to organize and analyze ideas and
- inability to communicate

or

failure to complete required work

8. a) Students who at the end of any semester or session do not complete any course for which they are registered at the end of the period prescribed for dropping courses without academic prejudice, shall receive the Grade "F" in that course. Exceptions may be made in accordance with Regulation Q.2(b) of the General Academic Regulations.

b) Clause 8.(a) notwithstanding, for good cause, an INCOMPLETE grade may, with the approval of the Department, be submitted. This INCOMPLETE grade shall, however, be valid only for one week following the commencement of classes in the next academic session as stated in the University Diary. In the event that a mark has not been received by the Registrar within the prescribed deadline the INCOMPLETE grade shall be changed to 0 F.

c) Clause 8.(b) notwithstanding, an extension of time not exceeding the end of the semester following that in which the INCOMPLETE was given may be permitted by the Faculty/School/College/Institute Committee on Undergraduate Studies, on the recommendation of the academic unit. In special circumstances, students registered for Social Work practice courses in the Bachelor of Social Work programme, may be given an extension not exceeding two semesters.

9. Students who are prevented by illness or bereavement or other acceptable cause, duly authenticated, from writing a final examination may apply on the appropriate form with supporting documents within one week of the original examination date to the appropriate administrative head to have their academic standing graded.

The decision of the administrative head, including information on the appeals route open to the student in the case of a negative decision, must be communicated in writing to the student and to the Dean/Director/Principal/Executive Officer and the Secretary of the Undergraduate Studies Committee of the student's Faculty/School/College/Institute within one week of the receipt of the student's complete application. In those cases where the academic unit accepts the extenuating circumstances the student may be permitted to write a deferred examination or, with the consent of both the academic unit and the student, the grade submitted may be based on term work alone. An interim grade of "ABS" (absent

for acceptable cause) will be assigned by the academic unit in the case of a student granted a deferred examination. This grade will be replaced by the final grading which must be received by the Registrar's Office within one week following the commencement of classes in the next academic semester or session.

NOTE: At Sir Wilfred Grenfell College, students should submit their applications to the Registrar's Office for transmission to the appropriate departments.

10. Students who are prevented by illness or bereavement or other acceptable cause, duly authenticated, from writing a deferred examination, may apply on the appropriate form with supporting documents within one week of the scheduled date of the deferred examination to the appropriate administrative head to have the examination postponed to a time not later than the last date for examinations in the semester following that in which the student was enrolled in the course.

The decision of the administrative head, including information on the appeals route open to the student in the case of a negative decision, must be communicated to the Registrar, to the student and to the Dean/Director/Principal/Executive Officer and the Secretary of the Undergraduate Studies Committee of the student's Faculty/School/College/Institute within one week of the receipt of the student's complete application.

NOTE: At Sir Wilfred Grenfell College, students should submit their applications to the Registrar's Office for transmission to the appropriate department."

It was agreed to refer to the Senate Committee on Undergraduate Studies for further consideration the following proposed re-wording of Clause 2. from Dr. Rich which is intended to ensure that students are provided with the information in a medium which they can take with them:

In line 4 of clause 2, delete the words "made available" and substitute the words "shall be provided in paper form".

*Report of the Academic Council of Graduate Studies

37.52 Department of Computer Science

Page 410, 1994-95 Calendar, following the heading Computer Science, A. Master of Science, amend clauses 2, 3 and 4 to read as follows:

"2. Candidates are required to complete a minimum of five graduate programme courses, which must be selected from at least three of the five areas in Computer Science. A candidate may take one graduate course offered by another academic unit as one of the required courses.

3. Each candidate is required to submit an acceptable thesis. The thesis project may involve a theoretical investigation and/or the development of an original, practical system. Each candidate is required to present a tentative outline of his/her proposed research to the Supervisor, with a copy to the Department Committee on Graduate Studies, by the end of his/her third semester in the programme (sixth semester for part-time students).
4. Prior to submission of a thesis, normally in the last semester of the programme, candidates are required to present a seminar on the thesis topic, methods employed and research results. All candidates are expected to take an active part in seminars and other aspects of the academic life of the Department of Computer Science."

37.53 School of Physical Education and Athletics

Page 402, 1994-95 Calendar, following the heading Regulations Governing the Degree of Master of Physical Education, C. Evaluation amend clause 4 to read as follows:

"4.a) The thesis and internship report shall normally be evaluated by three examiners approved by the Dean, at least one of whom shall be external to the University.

b) The comprehensive examination shall normally be constructed and evaluated by an examining committee of three examiners, at least two of whom shall be faculty members of the School of Physical Education and Athletics appointed by the Dean on the recommendation of the Director of the School."

37.54 Faculty of Medicine

Pages 413 and 432, 1994-95 calendar, following the heading Medicine replace the phrase "Associate Dean" with the following:

"Assistant Dean".

Page 413 and 432, following the heading Programmes amend first sentence of the first paragraph to read as follows:

"There are five graduate programmes, Immunology, Cell and Molecular Biology, Neurosciences, Community Medicine and Cardiovascular and Renal Science."

Following the heading Medicine amend first paragraph as follows:

"...Cardiovascular and Renal Physiology ...".

New courses

- 6140 Basic Cardiovascular and Renal Physiology
- 6141 Cardiovascular / Renal Techniques
- 6142 Selected topics in Cardiovascular and Renal
Physiology
- 6143 Cardiovascular Anatomy
- 6144 Current concepts in cardiovascular and renal
pathophysiology

38. Report of the Senate Committee on Committees

On the recommendation of the Committee on Committees, Dr. N. Rich was appointed to fill a vacancy on the Executive Committee of Senate caused by the resignation of Dr. C. Penney, for a term of office commencing immediately and expiring August 31, 1997.

39. Report of the Committee on Senate Elections

A memorandum dated February 1, 1995 was received from the Committee on Elections reporting the entitlement of each constituency to seats on Senate for the 1995-96 academic year in accordance with the Procedures for Selection of Senate Members.

A memorandum dated February 7, 1995 was also received reporting that Phase I of the annual election to the Senate Committee on Committees has been finalized. The following people have been elected for a term of office commencing September 1, 1995.

Dr. P. Allderdice	-	Medicine
Dr. S. Ghazala	-	Science
Dr. G. Kealey	-	Humanities/Music
Dr. E. Moore	-	Engineering and Applied Science
Mr. C. Dennis	-	Library

Phase II of the election which pertains to the election of three senators to the Committee on Committees will begin when the Senate elections have been finalized. A further report to Senate will be made following the completion of Phase II.

40. New Timetable

A memorandum dated January 25, 1995, was received from the Vice-President (Academic) informing Senate that, on the recommendation of the Advisory Committee on the University Timetable it is intended that the new timetable be implemented as proposed, subject to some minor technical modifications coming about as a result of the consultation process.

The Vice-President (Academic) agreed to take into account the broad cross-section of opinions given by senators during the discussion of this item.

OTHER BUSINESS

41. Semester Break

On behalf of the Department of Philosophy Dr. Bradley requested that the late placement of Memorial's semester break be examined. He noted that Memorial's semester break usually falls in the eighth or ninth week of classes compared to other Canadian universities where it falls in the sixth week of classes.

It was agreed to ask the Senate Committee on the University Timetable to look into this matter and to report back to Senate.

42. Dr. Kealey asked the President to comment on recent news articles regarding negotiations with the City of St. John's concerning the acquisition of the Aquarena and reports that a capital campaign will be launched by the University.

The President advised that the University had completed its negotiations with the City of St. John's and he felt that a good deal had been reached between the University and the City. As a result the Board of Regents acted on a recommendation to acquire the Aquarena. The President noted that the Aquarena will continue to be available for use by the general public.

With regard to a capital campaign the President stated that it is intended to launch a capital campaign which will tie in with the fiftieth anniversary of the founding of the University and of Confederation. Government has been approached with a request that it match private sector fund raising. It has been suggested that the major object of such a capital campaign would be a University Centre spanning the parkway which would house student organizations, a faculty/staff club, Post Office etc. Another major initiative would be the strengthening of the scholarship fund.

43. ADJOURNMENT

The meeting adjourned at 9:05 p.m.