December 12, 1990

The Fourth Regular Meeting of the Senate of The University of British Columbia for the Session 1990-91 was held on Wednesday, December 12, 1990 at 8.00 p.m. in Room 102, George F. Curtis Building.

Present: President D. W. Strangway, (Chairman), Chancellor L. R. Peterson, Vice-President D. R. Birch, Mr. S. Alsgard, Mr. D. A. Anderson, Dr. A. P. Autor, Miss M. D. Bain, Dr. M. A. Boyd, Dr. D. M. Brunette, Professor P. L. Bryden, Rev. P. C. Burns, Dean P. T. Burns, Mr. R. Bush, Miss A. L. Callegari, Dr. R. L. Chase, Dr. S. Cherry, Dr. T. S. Cook, Mr. N. A. Davidson, Dr. K. Dawson, Dr. J. D. Dennison, Dr. G. W. Eaton, Dr. A. J. Elder, Mr. E. B. Goehring, Dean J. R. Grace, Dr. S. E. Grace, Dr. R. D. Guy, Dean M. J. Hollenberg, Ms. A. Ironside, Dr. M. Isaacson, Dr. S. Katz, Dr. J. G. T. Kelsey, Miss W. A. King, Dr. S. C. Lindstrom, Mrs. L. Lohia, Dean P. A. Lusztig, Miss S. A. Mair, Dr. H. McDonald, Mr. R. H. McGowan, Mr. B. V. McGuinness, Dr. J. A. McLean, Dean J. H. McNeill, Mr. W. B. McNulty, Dean A. Meisen, Dr. A. G. Mitchell, Dr. L. Paszner, Dr. R. J. Patrick, Ms. B. M. Peterson, Mr. B. D. Prins, Professor R. S. Reid, Dr. P. Resnick, Dean J. F. Richards, Dean P. B. Robertson, Mr. M. M. Ryan, Dr. G. G. E. Scudder, Dean N. Sheehan, Dr. C. E. Slonecker, Dr. L. de Sobrino, Dr. L. J. Stan, Mr. B. Taylor, Dr. R. C. Tees, Dr. J. M. Varah, Dr. D. A. Wehrung, Dr. R. M. Will, Ms. N. E. Woo.

Messages of regret for their inability to attend were received from Mr. J. A. Banfield, Dean C. S. Binkley, Dr. D. G. A. Carter, Professor E. A. Carty, Dr. S. W. Hamilton, Dr. J. F. Helliwell, Dr. M. M. Klawe, Mr. O. C. W. Lau, Dean M. P. Marchak, Dean B. C. McBride, Mr. J. R. G. McQueen, Mr. J. A. Moss, Mr. M. D. Nikkel, Mr. A. J. Scow, Ms. P. F. Silver, Mr. M. Sugimoto, Ms. H. Swinkels, Mr. G. A. Thom, Dr. A. Van Seters, Dr. J. Vanderstoep, Dr. D. Ll. Williams, Dr. W. C. Wright, Jr.

Senate Membership

Lt. Governor in Council appointee

The Chairman welcomed to Senate Dr. Hugh McDonald, Lt. Governor in Council appointee, replacing Mr. S. R. Pearce.

Minutes of previous meeting

Dean Robertson)
Dr. Tees)

That the minutes of the Third regular meeting of Senate for the Session 1990-91, having been circulated, be taken as read and adopted.

Carried

Chairman's remarks and related questions

In commenting on the decision on mandatory retirement handed down by the Supreme Court, President Strangway drew attention to two points: first, that mandatory retirement was considered to be a reasonable exception to the Charter and, second, that universities are considered to be non-governmental agencies.

In response to a query, President Strangway stated that the Senate Budget Committee had discussed the tuition fee proposal and the proposal for a unit fee. Dr. Wehrung, Chair of the Senate Budget Committee, confirmed that the Committee had had some deliberations on the tuition fee increase and had endorsed the unit fee proposal and the three-year strategy.

On behalf of the student senators, Mr. McGowan stated that although the students recognized the need for a tuition fee increase they wished to registered their disapproval of the size of the increase and of the unit fee proposal.

At the request of the President, the Registrar commented on the unit fee proposal. He stated that in adopting the proposal to charge all undergraduate students on the basis of a fee that is directly related to the units in which they register, in the first year of application the maximum number of units that a student will have to pay for in the Winter Session will be 19. Those students in programs which have a fairly high number of units will not have to pay for units in excess of 19 in the first year. That number will increase to 20 in the following year, and in the third year there will be no limit.

In response to a query, President Strangway informed Senate that a task force was to be struck to look into work opportunities for students on

Chairman's remarks and related questions (continued)

campus. He stated that the objective of the three-year program was to supplement the provincial and federal system of loans and grants in an effort to ensure that students are not denied access to the University because of financial reasons. He stated that information on the proposed program would be widely circulated.

In response to a comment on the large exodus of students prior to the completion of the graduation ceremonies, President Strangway stated that students are requested not to leave before the end of the ceremonies and that every effort would be made to ensure that this did not happen again.

Reports of Committees of Senate

Academic Policy Committee

Policy on Reporting January Grades to Students

Dr. Tees, Chair of the Committee, presented the following report:

"The Committee recommends adoption of the following policy, effective January 1992:

(a) The Registrar's Office will mail a January "Statement of Grades" to each student registered in Winter Session Term 1 courses.

(b) The Statement of Grades will show the following:

(i) the student's final grades for all Term 1 courses.

(ii) all full Session courses and Term 2 courses in which the student is registered with a standing of "CIP" and no percentage or letter grade.

(c) Students who are not registered in any Term 1 courses will not receive a January Statement of Grades from the Registrar's Office.

(d) Final grades for Term 1 courses should be submitted to the Registrar's Office as soon as possible after the final examination using the "Report of Grades" form (or SIS screen) provided for each course.

(e) Faculties should approve grades for Term 1 courses following the December examinations in time for them to be posted to the student's record and reported to the student on the January Statement of Grades. If an approved final grade is not available for a course when the Statement of Grades is printed "mark not received" (indicated by asterisks in place of the grade) will be shown for that course.

Reports of Committees of Senate

Academic Policy Committee

Policy on Reporting January Grades to Students (continued)

(f) Interim grades will not be collected or posted to a student's record. This includes December grades for full Session courses. The Registrar's Office will not provide a Report of Grades form (or SIS file) for recording or reporting these grades.

(g) The release of December grades for full Session courses by instructors, Departments, Schools or Faculties is a matter for the instructor or unit concerned. It would be appropriate to use any policies or procedures that govern the release of other interim results, such as the results of mid-terms, term papers, etc.

(h) English Composition Test results will continue to be recorded following each scheduled sitting of the ECT.

(i) Faculties should approve grades for full Session and Term 2 courses and Sessional standing following the April examinations.

Other recommended changes in Senate Policy

The policy on the release of grades adopted by the Senate in February 1959, should be amended as follows:

> That Senate record its policy, and authorize the Registrar to inform all members of Faculty, that The results of final examinations (including supplementals) are to be considered confidential until they have been approved by Senate **the Faculty or School concerned** and released by the Registrar.

In the light of the recommendations above the following recommendation adopted in October, 1976, should be understood to have been amended by the deletion of the words shown:

> That Faculties be urged to make full use of the formal examination periods, both in December and April, and that, unless the relevant Dean and Head, for sound academic reason, grant exemption, all courses designed for First and Second year students (eg: courses in list A and B under Arts in the Calendar) be examined in December as well as in April. the results to be reported in the same form as are the final results.

Calendar Statement

The present Calendar statement "Examination Results" (p.23 of the 1990/91 Calendar) should be amended to read as follows:

Reports of Committees of Senate

Academic Policy Committee

Policy on Reporting January Grades to Students - Calendar Statement (continued)

> Results of sessional examinations in April are mailed to students in the graduating classes about **by** the time of Convocation, and to students in the lower years by approximately June 15. Any student who must meet an application date for another institution prior to June 15 should inform the transcript clerk in the Registrar's Office in order that arrangements may be made to meet the deadline.
>
> Results of **final** examinations in other Sessions **in term 1 of the Winter Session, Summer Session** and in Guided Independent Study courses are mailed to students as soon as possible after they become available **are approved.**
>
> (Additions are shown in bold print.)"

Dr. Tees)
Dr. Isaacson) That the policy on reporting January grades to students be approved.

Dr. Elder drew attention to the Senate policy which forbids the holding of examinations in the two week period prior to the December and April examinations, and asked that a stronger statement be issued on this matter. It was suggested that the inclusion of this policy in the Calendar would make it easier for students to draw this to the attention of instructors who are not aware of the regulation.

The Registrar stated that a reminder of this regulation is sent to all members of faculty each year. It was suggested that it might be more effective if the reminder was sent out in September when examination schedules were being planned.

It was agreed that the regulation be included in the Calendar.

The motion was put and carried.

Reports of Committees of Senate (continued)

Admissions Committee

Pharmaceutical Sciences - proposed changes in admission requirements

The Committee recommended approval of the following changes in admission requirements for the Faculty of Pharmaceutical Sciences:

New Requirements:

Engl 100	3u
Chem 110 or 120	3u
Math 100	1.5u
Math 101	1.5u
Biol 101 or 102 or 103	3u
Phys 110 or 115 or 120	3u
Electives are optional	
	Total = 15u

New Calendar Statement

Under Admissions: (p.219, col 1, 1990-91 Calendar)

(i) General Requirements

For admission to the Faculty, it is required that the student shall have completed the First Year in the Faculty of Science with credit for the courses shown below and an average grade of at least 60%, or that he or she shall have fulfilled the equivalent of these courses by work taken in an approved college or university.

Students are not admissible to the Faculty directly from Grade 12 or Grade 13 obtained in any province. Such students should seek admission to the Faculty of Science at UBC., or to another university or regional college if they are residents of B.C. Otherwise they should complete the equivalent of the following required courses at their own provincial universities.

The required prerequisite subjects are: English 100, Chemistry 110 or 120, Math 100, Math 101, Biology 101 or 102 or 103, Physics 110 or 115 or 120.

Students accepted into the Faculty must consult the office of the Dean with regard to an approved program.

(ii) English Composition Requirement (unchanged)

(iii) Advanced Standing (delete)

(Rationale: Due to changes in the First and Second Year curriculum, it will no longer be possible for students to enter the Faculty at the Second Year level.)

Reports of Committees of Senate

Admissions Committee

Pharmaceutical Sciences - proposed changes in admission requirements (continued)

Dr. Will)
Dr. Katz) That the changes in admission requirements for the Faculty of Pharmaceutical Sciences be approved.

Carried

Curriculum Committee (see Appendix 'B')

Dr. Sobrino, Chair of the Committee, presented the report.

Faculty of Applied Science

The Committee recommended approval of curriculum proposals from the Faculty of Applied Science, with the exception of the proposed cross-listing of APSC 152, subject to the following:

> APSC 121 - approval of this course, effective September 1990, is recommended with the proviso that the Faculty of Applied Science, after a rigorous academic review of the course, report back to the Senate Curriculum Committee.

Dr. Sobrino informed Senate that the Committee had expressed concern that APSC 121 was being offered before it had been approved by Senate, and felt that it should be made clear to the Faculties that this procedure was unacceptable. However, the Committee agreed to recommend approval retroactively since the course had been developed in response to Senate's request earlier this year that the Faculty of Applied Science take measures to ensure that future publications of the EUS newsletter would not contain offensive material.

Referring to the proposed cross-listing of CPSC 152 as APSC 152, Dr. Sobrino explained that approval was being withheld pending satisfactory consultation between Computer Science and Electrical Engineering.

Reports of Committees of Senate

Curriculum Committee

Faculty of Applied Science (continued)

The Committee expressed concern at the heavy unit load in the Applied Science program, and noted that 172 credits (86 units) were now required for the Mining and Mineral Process Engineering Program. Another concern expressed by the Committee was the replacement of basic material at the advanced specialized level. Dr. Sobrino stated that this was happening gradually, and sited as an example the dropping of MATH 357 in Mechanical Engineering on the grounds that with modern computer programs it is not necessary for students to learn very much about analysis.

Faculty of Arts

The Committee recommended approval of recommendations on Thematic Options, Individual Programs, and Administration in connection with the General B.A. Program, subject to the following rewording of the proposed Calendar statement:

Individual Programs

Students whose principal interests are not easily served by existing majors programs may be allowed by the Board of General Studies to design a General B.A. program (which is not a Major or Honours Program) involving work in several departments. Such students must have at least a second-class average in all courses attempted to complete the first 60 credits for the B.A. degree. Individual Programs must be developed in close consultation with an assigned adviser and must be approved by the Board of Studies for the General B.A.

Dr. Sobrino explained that the statement had been reworded in order to make it clear that students will get a General B.A. degree and not a majors or honours degree.

Reports of Committees of Senate

Curriculum Committee (continued)

Faculty of Commerce and Business Administration

The Committee recommended approval of curriculum proposals from the Faculty of Commerce and Business Administration.

Faculty of Dentistry

The Committee recommended approval of curriculum proposals from the Faculty of Dentistry, subject to minor editorial changes. The Committee also recommended approval of new 700 level courses.

Faculty of Forestry

The Committee recommended approval of curriculum proposals from the Faculty of Forestry, subject to a minor editorial change.

Faculty of Graduate Studies

The Committee recommended approval of Masters Programs in Oral Medicine, Oral Pathology, and Oral Radiology.

Faculty of Medicine

The Committee recommended approval of curriculum proposals from the Faculty of Medicine.

School of Nursing

The Committee recommended approval of curriculum proposals from the School of Nursing. Dr. Sobrino explained that Nursing 445 Extended Practicum in Professional Nursing was being changed from required to optional as it was impossible to place all the nurses in the appropriate institutions to do the practicum.

Reports of Committees of Senate

Curriculum Committee (continued)

Faculty of Science

The Committee recommended approval of curriculum proposals from the Faculty of Science.

Dr. Sobrino)
Dr. Resnick) That the proposals of the Faculties of Applied Science, Arts, Commerce and Business Administration, Dentistry, Forestry, Graduate Studies, Medicine, Science, and the School of Nursing be approved.

In response to Dr. Sobrino's comments concerning the Applied Science proposals, Dean Meisen stated that he had informed Senate in the Spring that a course, such as Society and the Engineer, would be developed as quickly as possible. Because of the urgency to get this course into the curriculum, the Faculty had decided to implement it in September feeling that it had Senate's approval in principle.

As far as unit loads were concerned, Dean Meisen stated that the Applied Science programs were comparable to programs offered at other universities in that respect.

Dr. Chase drew Senate's attention to the changes in the Geophysics Program, and stated that it appeared that students could go through Geophysics without a single course in Geology. He felt that a Geology course should be taken at some time in the majors or honours programs, particularly in the case of those students intending to seek employment with oil companies, since it had come to his attention that given this program change a consulting geologist would be advising oil companies to recruit people from universities other than UBC.

Reports of Committees of Senate

Curriculum Committee

Faculty of Science (continued)

Dr. Sobrino responded that this matter had not been brought to the attention of the Curriculum Committee. However, he felt that such problems should be addressed at the Faculty level.

Referring to the Forestry proposals, Dean Lusztig suggested that the Faculty look at the prerequisites of those Commerce courses that are listed as requirements for the second and third years to be sure that they have recognized that these prerequisites exist. He stated that the fourth year economic electives listed were prerequisites to the required courses in second and third years and he felt that it should be noted that these were prerequisites.

Dean Grace drew Senate's attention to the 700 level courses submitted by the Faculty of Dentistry in connection with the three programs in Oral Medicine, Oral Pathology, and Oral Radiology, and pointed out that these courses were not for credit towards the graduate degree.

The motion was put and carried.

Nominating Committee

Dr. Elder, Chair of the Committee, presented the following report:

1. Membership of Ad Hoc Committee to Review Student Participation in Faculty Appointment and Tenure Committees

   At its meeting of November 14, 1990, Senate agreed that an ad hoc committee be instructed to consult faculty and students with regard to the existing Senate guidelines barring student participation from department decision-making on appointments, promotion, and tenure, and report back to Senate on whether changes may be required to these guidelines.

   The Nominating Committee recommends that an ad hoc committee be established with the following membership:

December 12, 1990

Reports of Committees of Senate

Nominating Committee

1. Membership of Ad Hoc Committee to Review Student Participation in Faculty Appointment and Tenure Committees (continued)

   Prof. P. L. Bryden
   Dr. S. Katz
   Miss W. A. King
   Mr. O. C. W. Lau
   Dr. P. Resnick
   Dean P. B. Robertson

2. Registrar's Voting Privileges on Senate Committees

   The Agenda Committee was asked for advice on whether the Registrar should have a vote on Senate Committees since Article 61 of the University Act precludes the Registrar from voting in Senate.

   The Agenda Committee has recommended that in keeping with the policy of Senate of allowing appointment of non-Senate members as full voting members of Senate Committees, it seems appropriate to invite committees of Senate to consider whether they wish to recommend to Senate that such an appointment be accorded the Registrar.

   The Nominating Committee recommends that the Registrar be a full voting member of the Nominating Committee

3. Membership on Senate Committees

   The Nominating Committee has received the two following recommendations from committees, to be conveyed to Senate for approval:

   (i) Committee on Student Awards

   The Committee agreed to recommend to the Nominating Committee that a Vice President be added to the Committee

   The Nominating Committee recommends that this be the Vice President of Student and Academic Services

   (ii) University Library Committee

   The Committee recommends that the Vice President Student and Academic Services and the Director of the School of Library, Archival and Information Studies be co-opted to its membership.

4. Representative on the Regent College Senate

   The Nominating Committee recommends that Dr. L. Paszner replace Rev. P. C. Burns on the Regent College Senate.

Reports of Committees of Senate

Nominating Committee (continued)

Dr. Elder)
Dr. Scudder) That the recommendations of the Nominating Committee concerning the membership of the Ad Hoc Committee to Review Student Participation in Faculty Appointment and Tenure Committees be approved.

Carried

Dr. Elder)
Dr. Katz) That the Registrar be a full voting member of the Nominating Committee.

Carried

Dr. Elder)
Dr. Resnick) That the Vice President of Student and Academic Services be added as a full voting member of the Committee on Student Awards and the University Library Committee.

Carried

Dr. Elder)
Dr. Katz) That Dr. L. Paszner replace Rev. P. C. Burns on the Regent College Senate.

Carried

Student Awards

Dr. Cook, Chair of the Committee, presented the report. Dr. Cook drew Senate's attention to the Kerimar Foundation Scholarships and noted that the words "to Italian Studies students" should be inserted after the words "The awards are made...".

Dr. Cook)
Dean Hollenberg) That the new awards (listed in Appendix 'A') be accepted subject to the approval of the Board of Governors and that letters of thanks be sent to the donors.

In response to a query concerning the C. Wilfred Pearson Scholarship, Dr. Cook explained that this would be awarded strictly on the basis of merit. When all the major scholarships have been awarded, the next eligible student would qualify for this scholarship.

The motion was put and carried.

Reports of Committees of Senate

Student Awards (continued)

Dr. Cook reminded Senate that at the November meeting, after a lengthy discussion, Senate had reaffirmed its guidelines and requested the Committee to inform the donors of the Van-Tel Credit Union Sadie McIlwaine Memorial Bursary that the University was unable to accept this bursary. The Committee had reconsidered a revised version of the award and was unanimous in its decision to bring the award back to Senate. However, the Committee was not unanimous in recommending acceptance of the award since the award contains non-academic restrictions which fall outside the "affirmative action" context of Senate's policy and guidelines. Dr. Cook stated that the Director of Awards and Financial Aid, Mr. Hender, had been unable to persuade the donors to change the terms of the award, and pointed out that guideline (b) stated that where non-academic considerations are considered by the donor to be of overriding importance, the Senate shall satisfy itself that the terms of the proposed award are consistent with the general statement of policy. She pointed out that this award did not meet the overall non-academic restrictions of Senate's policy. Given these points, the Committee was divided in its opinion as to whether the Senate, and ultimately the University, should continue to accept awards of this kind, and although the Committee was recommending approval of this bursary it felt that it needed Senate's advice on the application of its policy and guidelines for the future.

Dr. Cook)
Dean Lusztig) That the Van-Tel Credit Union Sadie McIlwaine Memorial Bursary be accepted subject to the approval of the Board of Governors and that a letters of thanks be sent to the donor.

In response to a query, Dr. Cook confirmed that the provision that the award would be tenable at any post-secondary institution had been removed.

The motion was put and carried.

December 12, 1990

Report of the University Librarian 1989-90

In speaking briefly to the report, Dr. Patrick, the University Librarian, drew attention to the increased activity in serving other libraries, and noted that interlibrary lending had increased 9.5%. In addition, instructional sessions increased by 30%. Dr. Patrick noted that the Library has access to four online databases, that it has eleven terminals with access to the online catalogue, and that it could use many more. She noted that improved photocopy services had lead to an increase in the use of existing material. Dr. Patrick paid tribute to the work done by the Library staff.

Academic Year 1991-92

Dean Burns)
Dr. Wehrung) That the proposed dates for the Academic Year 1991-92 be included in the Calendar.

There was considerable discussion concerning the lecture time lost on Mondays because of statutory holidays. It was agreed that a task force, organized by the Registrar, should consider possible ways of making up the instructional activities that are lost as a result of the three Monday holidays in the first term (Labour Day, Thanksgiving, and Remembrance Day).

In amendment:

Dr. Elder)
Dr. Scudder) That the orientation activities be discontinued.

Carried

The motion, as amended, was put and carried.

Proposals of the Faculties

Faculty of Arts

Proposal to change the name of the Department of Theatre to the Department of Theatre and Film

It was explained in the material circulated that Film is a distinct discipline and it is irrational to grant a degree in Theatre to people

Proposals of the Faculties

Faculty of Arts

Proposal to change the name of the Department of Theatre to the Department of Theatre and Film (continued)

who have studied Film. This distinction is a normal one where these two divisions are incorporated into a single department. Students and the general public find the current designation of Film courses as Theatre courses confusing. This distinction was strongly urged by the Review Committee Report which recommended a change in title and a separation of curricula.

Dr. Tees)
Dr. Resnick) That the proposal of the Faculty of Arts to change the name of the Department of Theatre to the Department of Theatre and Film be approved.

Carried

Faculty of Graduate Studies

Grading Policies

The following proposed revisions to Calendar statements had been circulated:

D. Course Work

1. At least 60% must be obtained in any course taken in a Master's program for a student to be granted Pass Standing. However, only six credits of Pass Standing can be credited toward a Master's program; for all other courses credited to the program, at least 68% must be obtained.

It was noted that under the new policy the following categories will be used:

Percent	Letter Grade
90-100	A+
85-89	A
80-84	A-
76-79	B+
72-75	B
68-71	B-
64-67	C+

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Proposals of the Faculties

Faculty of Graduate Studies

Grading Policies (continued)

Percent	Letter Grade
60-63	C
55-59	C-
50-54	D
00-49	F*

*For those Faculties and Schools where the passing grade is higher than 50%, failing grades will be assigned a letter grade of F.

Dean Grace)
Dr. Isaacson) That the proposed revisions be approved.

Carried

Membership in the Faculty of Graduate Studies

The following recommendations concerning membership in the Faculty of Graduate Studies had been circulated:

1. Elected faculty representation on the Graduate Council should be expanded from 50 at present to 75 members. These should be distributed using the existing formula which allocates representatives among the faculties in proportion to the number of faculty members who are also members of the Faculty of Graduate Studies and the size of the graduate student body. Individual faculties should be left to determine the appropriate distribution of representatives among their own departments' programs. Faculty members with joint appointments would be able to represent two departments or programs on Council.

2. Elected student representation on the Graduate Council should be increased in proportion to the increase in faculty membership, i.e. from 6 to 9. Student membership should continue to be allocated among faculties according to the size of the graduate student body.

3. The effectiveness of the Graduate Council should be reviewed again in three years with particular attention to the issue of representativeness.

Dean Grace)
Dr. Cherry) That the recommendations concerning membership in the Faculty of Graduate Studies be approved.

Carried

Proposals of the Faculties (continued)

Faculty of Medicine

Proposal to extend the second academic year by one week

It was stated in the material circulated that the lengthening of second year by one week is meant to facilitate a decompression of the exam schedule in second year. In the current schedule, examinations are held in April in some courses while other courses are still on-going. The revised schedule will provide much needed study time for these exams and for those that occur at the end of the year and will alleviate the problem of students skipping on-going classes in order to study for exams in other courses. The alternative option of cutting back on instruction by one week and keeping the length of the year the same as it is is not a viable option given the scope of material taught in the second year.

Dean Hollenberg)
Dr. Slonecker)
That the second academic year be extended by one week for study/exam time commencing in the 1991/92 year.

Carried

Report of the Tributes Committee (in camera)

Honorary Degrees

In accordance with procedures established at the March 18, 1987 meeting of Senate, background information on the proposed candidates for degrees as recommended by the Tributes Committee was circulated at the meeting.

The Committee recommended that invitations be extended to the following persons to receive honorary degrees at the 1991 Congregation Ceremonies:

Sidney Altman
- Nobel Prize Winner in Chemistry

Tetsuo (Ted) Aoki
- Chairman, Dept. of Secondary Education, Alberta. Distinguished Service Award recipient

Report of the Tributes Committee

Honorary Degrees (continued)

Baroness (Lydia) Dunn
Member of the House of Lords, internationally recognized for her work as Chair of the Hong Kong Trade Development Council

Judith Forst
Opera Singer

Patricia Mary Fulton
Outstanding Service Award, United Way. Has made an outstanding contribution to social welfare in Canada.

Lucille M. Johnston
An outstanding Canadian who has made a significant contribution to the Province and served as a role model and pioneer for women.

Yousuf Karsh
Author

Antonine Maillet
Canadian novelist, playwright, folklorist

Gordon Frederick MacFarlane
Involved in Capital Fund Campaign for the Cancer Control Agency, the United Way Campaign, President of the Vancouver Public Aquarium and the UBC Campaign Leadership Committee.

Cornelia Hahn Oberlander
Independent landscape architect who has collaborated with numerous famour architects.

Dorothy E. Smith
Known nationally and internationall for her groundbreaking work in feminist epitemology

Elijah Edward Smith
Former Chief of the Kwanlin Dun Indian Band. Involved in the land claims negotiations in the Yukon.

Dr. Dennison)
Chancellor Peterson) That the recommendations of the Tributes Committee concerning Honorary Degrees be approved.

Dr. Cook)
Dr. Sobrino) That the recommendations be considered seriatim.

Lost

The motion to approve the recommendations of the Tributes Committee was put and carried.

December 12, 1990

Report of the Tributes Committee

Honorary Degrees (continued)

Dr. Dennison informed Senate the Mr. Stephen Lewis had been unable to attend the Congregation 1990 graduation ceremonies to receive his honorary degree but that he had accepted for 1991.

The meeting adjourned at 9.45 p.m.

The next regular meeting of Senate will be held on Wednesday, January 16, 1991.

Secretary

Confirmed

Chairman

December 12, 1990

APPENDIX 'A'

Awards recommended for acceptance by Senate

Astra Pharma Canada Inc. Prize in Gastroenterology - This book prize is offered by Astra Pharma Canada Inc. The award is made on the recommendation of the Department of Medicine to a resident demonstrating proficiency in Gastroenterology. (Available 1990/91 Winter Session).

Delta Catalytic Corporation Scholarship - A $1,000 scholarship is offered by Delta Catalytic Corporation to a student entering the final year in Civil, Chemical, Electrical or Mechanical Engineering. Preference will be given to a student with an interest in the field of Design Engineering and Construction. The financial circumstances of the candidate may be considered. (Available 1991/92 Winter Session)

Frances Mary Chave Memorial Scholarship - A $3,000 scholarship has been endowed by Dorothy Herberg in memory of her mother. The award is made on the recommendation of the Department of Botany in consultation with the Faculty of Graduate Studies to a student entering the first year of study for an M.Sc. or Ph.D. in Botany. (Available 1991/92 Winter Session)

Keith Haynes Memorial Scholarship - A $500 scholarship is offered by Joyce Green in memory of her son. The scholarship is made on the recommendation of the Faculty of Medicine to a student demonstrating excellence in Medical Genetics. (Available 1990/91 Winter Session)

Dr. A. R. Hicks Memorial Bursary - A $1,000 bursary is offered by Mrs. A. R. Hicks in memory of her husband. The award is made to a student in the Faculty of Medicine. (Available 1990/91 Winter Session)

Kerimar Foundation Scholarships - Two scholarships in the amount of $750 each are offered by the Kerimar Foundation. The awards are made to Italian Studies students on the recommendation of the Department of Hispanic and Italian Studies. (Available 1990/91 Winter Session)

Frank Lam Scholarship - A $350 scholarship is offered by Frank Lam to a student completing first or second year Law with demonstrated achievements in the field of human rights law. Students must apply to the Office of the Associate Dean by March 31st, and include a resume and letters of reference. The award is made on the recommendation of the Faculty of Law. (Available 1991/92 Winter Session)

Lang Michener Lawrence & Shaw Scholarship - A scholarship in the amount of $500, a gift of Lang Michener Lawrence & Shaw, Barristers & Solicitors, is awarded annually to a student in first year Law. The award is made on the recommendation of the Faculty of Law. (Replacing Lang Michener Lawrence & Shaw Prize in Commercial Law which is discontinued.) (Available 1990/91 Winter Session)

C. Wilfred Pearson Scholarship - A $500 scholarship is offered by the family of C. Wilfred R. Pearson in his memory. The award is open to undergraduates in any year or Faculty. (Available 1990/91 Winter Session)

December 12, 1990

APPENDIX 'A'

Awards recommended for acceptance by Senate (continued)

Van-Tel Credit Union - Sadie McIlwaine Memorial Bursary - To honour the memory of Sadie McIlwaine, a late Director of Van-Tel Credit Union, a $500 bursary is available to sons, daughters and legal dependents residing in B.C. of members of Van-Tel Credit Union. The winner is selected by the UBC Awards Office in consultation with the Van-Tel Credit Union.

Lynda Winkler Memorial Bursary - A $500 bursary has been endowed by Syd and Anna Winkler in memory of their daughter Lynda Winkler. The award is made to a student in an honours or majors program in Sociology. (Available 1990/91 Winter Session)

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF APPLIED SCIENCE

New APSC 121 (1) Society and the Engineer

Changes APSC 122 - change in number, hours (formerly APSC 120)
Change in Program - replace APSC 120 (0) by:
APSC 121 (1)
APSC 122 (0)

Bio-Resource Engineering

Changes in Programs

Second Year
Replace CIVL 215 by CHML 251
Move BIOE 285 from 2nd Term to 1st Term

Third Year - effective September, 1992
Replace BIOE 366 by CHML 351

Civil Engineering

Changes CIVL 400 - change in title description
CIVL 493 - change in description

Deletions CIVL 436, 454, 482

Computer Science

Change CPSC 152 - change in number, title, description, hours (formerly CPSC 151)

Electrical Engineering

New ELEC 382 (4) Electrical Laboratory IIIA

Changes - All undergraduate Electrical Engineering courses should be listed in the "Courses of Instruction" section of the Calendar as being offered in 1st term or 2nd term.

Changes in Programs

Second Year - effective September, 1990
All Options
delete MATH 257

Third Year - effective September, 1991
Regular Program and Honours Mathematics Option
Add MATH 257 to 1st term
Delete ELEC 367
Move STAT 251 from 1st to 2nd term

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF APPLIED SCIENCE

Electrical Engineering

Changes in Programs (continued)

Computer Engineering Option
Add MATH 257 to 1st term
Delete ELEC 367
Move ELEC 315 from 2nd to 1st term
Replace ELEC 380 by ELEC 382

Fourth Year - effective September, 1992
Regular Program and Honours Mathematics Option
Add ELEC 367 to 2nd term
Reduce elective requirement from 27 credits to 24 credits

Computer Engineering Option
Add ELEC 367 to 2nd term
Delete requirement for 3 credits of elective requiring the approval of the Computing Engineering adviser

Honours Mathematics Option
It is possible ... Honours degree in Mathematics, by:
a) obtaining 65% in MATH 226/227 or Math 253/254 (MATH 200 is recommended for students taking MATH 253/254).
b) obtaining a 65% average in the following courses: MATH 300 and 301 (instead of 350), 320, 321, 400, 401, and 3 additional credits chosen from MATH 322, 323, 402, 403, 416-429, 449.

Computer Engineering Option
Rewording of present statement on promotion requirements, as follows:
Admission into the second year Computer Engineering Option will be subject to approval by the Computer Engineering adviser. Enrolment in Computer Science courses numbered 300 and above is controlled by stringent academic admissions criteria. Students may be denied entry into third year Computer Science courses where only a minimum pass has been obtained in prerequisite courses. Students in the Computer Engineering Option should consult the Computer Engineering Adviser during the spring or summer to determine the criteria for admission to courses numbered 300 and above. Students who are unable to continue in the Computer Engineering Option will be able to revert to the regular Electrical Engineering program.

Engineering Physics
Changes in Programs
Third Year Core
Delete APSC 278
Add CPSC 118
Add PHYS 351

Fourth Year Core
Add MATH 300 and 301

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF APPLIED SCIENCE

Engineering Physics

Changes in Programs (continued)

Fourth Year, All Options
Technical elective reduced by at least 3 credits
Option 1 "ELEC" - reduced to 4 credits
Option 2 "MECH" - reduced to 3 credits
Option 3 "METL" - delete technical elective (3 credits)
Option 4 "GEOP" - reduced to 4 credits all from Computer Science or a discipline relevant to Geophysics
Option 5 "CPSC" - reduced to 6 credits
Option 6 "OCGY" - delete technical elective (3 credits)

Fourth Year
Option 3 "METL" - MMAT 370 and 374 replaced by MMAT 370
- add MMAT 377

Fifth Year Core
MATH 400 - change to 3 credits

Fifth Year
Option 3 "METL"- change MMAT 470 to MMAT 377 (to be retained for 1991/92)
Delete MMAT 486 from technical elective list

Fifth Year
Option 5 "CPSC" - add CPSC 310 and 319 as core courses
- reduce elective by 6 credits

Geological Engineering

Changes in Programs

Option I - change to **Fuels and Minerals**
Option III - change to **Environmental and Geotechnical**
Add the words, "or environmental problems", to the final sentence in the preamble.

Second Year
Introduction of elective courses leading to Options in Third Year:
Fuels and Minerals - Option I
MMPE 290 (4) Introduction to Mining and Mineral Processing
Applied Geophysics - Option II
GEOP 232 (3) Introduction to Experimental Geophysics
Environmental & Geotechnical - Option III
SOIL 200 (3) Introduction to the Study of Soils
Complementary Studies Electives reduced to 3 credits

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF APPLIED SCIENCE

Geological Engineering

Changes in Programs (continued)

Third Year
MATH 357 replaced by MATH 350
Option I - MMPE 201 replaced by MMPE 290
MMPE 303 - change to 2nd term
Option III - MMPE 303 - change to 2nd term

Fourth Year
Delete MMPE 404
Change title, credits MMPE 403

Changes **Third Year - Environmental Option** - effective September, 1992
GEOL 302 and Technical Electives - transferred to Options
Option I - add GEOL 302 and technical electives
- delete MMPE 290
- add alternative electives GEOP 232 or SOIL 200
Option II - add alternative electives GEOL 302 or 303
- add technical electives (3)
Option III - add alternative electives GEOL 302 or 303
- add technical electives
Add Option III(a) **Environmental Option**
Add Option III(b) **Geotechnical Option**

Mechancial Engineering

Changes MECH 260, 360, 380, 460 - change in description
Changes in Program
Third Year
Delete MATH 357 from:
Regular Program
Computer-Aided Automation Option
Industrial Aerodynamics and Aircraft Option
Naval Architecture Option

Metals and Materials Engineering

New MMAT 369 (2) Solidification

Changes MMAT 351 - change in hours, credits to (3)
MMAT 361 - change in hours
MMAT 370, 378 - change in title, description, hours
MMAT 377 - change in number (formerly 470)
MMAT 454 - change in prerequisite

Deletions MMAT 374, 476, 486

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF APPLIED SCIENCE

Metals and Materials Engineering (continued)

Changes in Programs

Third Year

Change title of MMAT 370
Delete MMAT 374
Change credits and title MMAT 378
Add MMAT 369
Add MMAT 470

Fourth Year

Delete MMAT 470, 476, 486

Mining and Mineral Process Engineering

New	MMPE 290 (4)	Introduction to Mining and Mineral Processing
	MMPE 293 (1)	Seminar
	MMPE 491 (2)	Industrial Expert Systems
	MMPE 499 (3)	Industrial Expert Systems

Changes
MMPE 202 - change in number, term, prerequisite (formerly MMPE 300)
MMPE 303 - change in term
MMPE 331 - change in title, description, prerequisite
MMPE 333 - change in description, credits to (4), hours, prerequisite
MMPE 395 - change in description, hours, credits to (3)
MMPE 403, 404 - combined into MMPE 403 (3) Rock Mechanics
MMPE 432 - change in term, hours, credits to (3)
MMPE 434 - change in hours, credits to (3), prerequisite
MMPE 490 - change in number (formerly 450)

Deletions MMPE 201, 231, 332, 394, 404

Changes in Programs

Second Year

Delete APSC 278, ELEC 263
Replace CIVL 215 by CHML 251
Add MMPE 210
Add MMPE 290
Add MMPE 293
Add Complementary Studies (3)

December 12, 1990

APPENDIX 'B'

Course and curriculum proposals

FACULTY OF APPLIED SCIENCE

Mining and Mineral Process Engineering

Changes in Programs (continued)

Third Year (1991/92)
Core
Delete GEOL 354
Add ELEC 370
Change MMPE 300 to MMPE 210 (transferred to Second year but retained in Third Year for 1990/91)
Delete MMPE 332
Change credits MMPE 333 to (4)
Change credits MMPE 395 to (3)
Add ENGL 301
Delete MMPE 394

Add **Mining Option** (1991/92)
GEOL 354

Add **Mineral Processing Option** (1991/92)
MMAT 351

Third Year (1992/93)
Add APSC 278
Add ELEC 263
Delete MMPE 202
Reduce Complementary Studies electives to 3 credits

Mining Option (1992/93)
Add Complementary Studies Elective (3)

Mineral Processing Option (1992/93)
Add Complementary Studies Elective (3)

Fourth Year (1991/92)
Core
Add MMPE 492
Delete MMPE 434
Change MMPE 450 to 490

Mining Option
MMPE 402
MMPE 403
Technical Electives (4)

Mineral Processing Option
MMAT 351
MMAT 432
MMPE 434
Technical Electives (1)

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF APPLIED SCIENCE

Mining and Mineral Process Engineering

Changes in Programs (continued)

Fourth Year (1992/93)
Core
Complementary Studies elective reduced from 6 to 3 credits

Both Options
Technical electives increased to 7 credits

Mineral Processing Option
Delete MMAT 351

FACULTY OF ARTS

THEMATIC OPTIONS

Recommendation 1. Thematic Options

That a small number of thematic options be permitted as part of a general B.A. program. Some of these might be developed out of the existing studies options if that seems appropriate to the faculty involved but should include two or three additional programs, with similar topical foci, and a limited number of broader thematic options.

Recommendation 2. Requirements for Thematic Options

That thematic options in the general B.A. program require successful completion of 36 credits of 300- and 400-level courses approved for the option, of which 18 credits and no more than 24 credits must be from one discipline.

Recommendation 3. Cross Referencing

That International Relations, Asian Area Studies, and Medieval Studies be cross referenced in the section of the Calendar that describes the general B.A. Program.

Recommendation 4. Admission Requirements

That the application procedure and general requirements for admission to thematic options be the same as those for the general option in the general B.A. program. In addition applicants would be required to satisfy any specific prerequisites for courses that are part of the thematic option selected and any other specific requirements for admission to that option recommended by the Board of Studies and approved by the Faculty and Senate.

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF ARTS (continued)

INDIVIDUAL PROGRAMS

Recommendation 5. Individual Programs

That the existing provision for "special programs" be renamed "individual programs" and that:

a) admission be restricted to students who have at least a second-class average on all courses attempted to complete the first sixty credits of course work;

b) each student be assigned an adviser with whom the student's program will be developed;

c) approval for each student's program be a responsibility of the Board of Studies.

ADMINISTRATION

Recommendation 6. Administration

That the Board of Studies:

a) have departmental powers with respect to the design and development of curricula for thematic options within the general B.A. program and to make recommendations to the Faculty of Arts through the Curriculum Committee;

b) although lacking an explicit departmental budget, have the power to recommend to the Faculty of Arts, subject to the approval of the Dean on fiscal grounds, the establishment of up to 6 credits of 300- or 400-level courses for each approved thematic option;

c) be responsible for the admission of students to thematic options and individual programs and for the advising and approval of programs of study for wuch students.

Recommendation 7. Periodic Review of Thematic Options

a) that reviews of thematic options be conducted at suitable intervals;

b) that the concerns of the review committee among other things include the academic characteristics of the students who have enrolled in the program and the characteristics, coherence and academic quality of their programs of study;

c) that in all cases the review committee have the power to recommend to the Faculty continuance, revision or discontinuance of the program.

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF ARTS (continued)

Calendar Statement

Individual Programs

Students whose principal interests are not easily served by existing majors programs may be allowed by the Board of General Studies to design a General B.A. program (which is not a Major or Honours Program) involving work in several departments. Such students must have at least a second-class average in all courses attempted to complete the first 60 credits for the B.A. degree. Individual Programs must be developed in close consultation with an assigned adviser and must be approved by the Board of Studies for the General B.A.

FACULTY OF COMMERCE AND BUSINESS ADMINISTRATION

Deletion COMM 459

New COMM 459 (3) Financial Statement Analysis
COMM 450 (3) Financial Accounting - Intermediate II

Changes COMM 353 - change in credits to: (3)
COMM 451 - change in title, description
COMM 453 - add prerequisite

Change in Program

Accounting Option
Third Year
Comm 353, 354
3 credits of electives

Fourth Year
Comm 450, 453, 454
One of Comm 355, 451, 452, 455, 459 and 12 credits of electives

Note: Comm 355 may be taken in third year, in which case students would take 15 credits of electives in the fourth year.

Change in B. Comm. Program
Second Year
Change requirements from "Econ 201" to "Econ 201 or equivalent"

FACULTY OF DENTISTRY

New CDSC 411 (1 credit) Introduction to Orthodontics

Changes CDSC 421 - change in title and description
CDSC 434 - change in number to CDSC 424
CDSC 424 - change in description and number to CDSC 434

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF DENTISTRY (continued)

Oral Medical and Surgical Sciences

New OMSS 713 Clinical Oral Medicine
OMSS 734 Clinico-Pathalogical Conferences
OMSS 712 Oral Surgical Pathology
OMSS 750 Head and Neck Oncology
OMSS 760 Review of Cytology Techniques and Oral Mucosal Cytology

FACULTY OF FORESTRY

Forest Resources Management

Program changes - Fourth Year

Delete FRST 432
Increase free electives to (12-15)

Footnotes:

[1]Select course not taken at Grade 12 level. Note that virtually all courses in Biology require Biology 101, 102, or 104 as a prereqisite.

[2]Electives should be chosen in consultation with a faculty advisor. Fourth year electives must be 200 level or above.

(Footnotes 3 to 5 do not change)

[6]Those students who elect Forestry 497 require 12 credits; those who elect Forestry 499 require 9 credits.

[7]Those students who elect Forestry 497 require 9 credits; those who elect Forestry 499 require 6 credits.

Deletion FRST 432

Change FRST 292 - change in title and description

Forest Sciences

New FRST 311 (3) Plant Physiology I

Change FRST 407 - change in number, title, description, prerequisite (formerly 307)

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF FORESTRY (continued)

Forest Harvesting

Changes FORH 262 - change in description, credits, hours to: (2)
FORH 263 - change in description, credits, hours to: (1)
FORH 362 - change in title, description, prerequisite
FORH 363 - change in title, description
FORH 459 - change in description
FORH 463 - change in title, description, credits to: (3)
FORH 464 - change in description, prerequisite

Delete FORH 465

Changes in Programs

Forest Harvesting (B.S.F.)
"...
The program consists of a minimum of 135 credits of in-session and 11 credits of extra-sessional course work. There are 12 credits of electives. Selection of these elective courses will be done in consultation with a faculty adviser, subject to a minimum of 6 credits of Social Science or Humanities, 3 credits of technical and 3 credits of Wood Science. A graduating project must be completed involving a topic within the student's concentration."

Changes to other programs:

FRM B.S.F. program (page 130, column 1) [Entry from Senior Secondary School]
Second Year: Forest Harvesting 263^3 (1 1/2) to Forest Harvesting 263^3 (1)
Third Year: Forest Harvesting 262 (1 1/2) to Forest Harvesting 262 (2)
Total credits to (16 1/2 - 17)

FRM B.S.F. Program (page 130, column 2) [Entry from First Year Sciences]
Second Year: Forest Harvesting 263^3 (1 1/2) to Forest Harvesting 263^3 (1)
Third Year: Forest Harvesting 262 (1 1/2) to Forest Harvesting 262 (2)
Total credits to (16 1/2 - 17)

Forest Sciences Major B.Sc. (Forestry) (page 132, column 2)
Forest Harvesting 263^2 (1 1/2) to Forest Harvesting 263^2 (1)

In FRM Study Program description (page 130, column 1) change "7 credits of extra sessional course work" to "6 1/2 credits of extra sessional course work". [Paragraph 3]

In Forest Sciences Major, (page 132, column 1) change "7 credits of extra sessional course work" to "6 1/2 credits of extra sessional course work". [Paragraph 2].

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF FORESTRY

Forest Harvesting

Changes in Programs (continued)

Students entering from senior secondary school

First Year		Second Year	
English 100	6	Economics 100	6
Mathematics 100 and 101	6	Soil Science 200	3
Biology 101 or 102 or Chemistry 103 or 110 or Physics 110	6[1]	Forestry 204	4
		Forestry 237	3
		Forestry 238	3
Forestry 111	6	Forest Harvesting 260	3
Forestry 131	3	Forest Harvesting 262	4
Forestry 132	3	Elective	3
		Physics 170	3
		Physics 236	3
	30		35
		Forest Harvesting 263[2]	2

Third Year		Fourth Year	
Forestry 305	3	Forestry 332	3
Forestry 306	3	Forestry 333	3
Forestry 308	2	Forestry 395	3
Forestry 309	2	Forestry 421	3
Forestry 325	3	Forestry 442	3
Forestry 327	2	Forest Harvesting 459	3
English 301	3	Forest Harvesting 463	3
Forest Harvesting 359	3	Forest Harvesting 464	3
Forest Harvesting 362	3	Forestry 497	2
Forest Harvesting 363	3	Forestry 445	1
Forestry 385	2	Wood Science Elective	3
Forestry 386	2	Elective	3
Civil Engineering 230 or Wood Science 376	3		
Elective	3		
	37		33
Forestry 351[3]	3	Forestry 451[4]	6

Footnotes:

[1]Select one not taken at Grade 12 level.
[2]Held in the week preceding second year.
[3]Seven days of field study prior to start of fall term in third year.
[4]Eighteen working days of field study at the University Research Forest immediately following spring examination period of third year.

Rationale: Unit load for FORH 262 was increased to reflect increase in lab time. Unit load for FORH 263 was reduced to reflect reduction in lab time. Mathematics 200/Commerce 329/Commerce 457 eliminated to make room for Social Science or Humanities elective.

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF FORESTRY

Forest Harvesting

Changes in Programs (continued)

Students entering from First Year Science (or its equivalent)

First Year		Second Year	
(See Faculty of Forestry Admission requirements)		Forestry 111	6
		Forestry 131	3
		Forestry 132	3
		Economics 100	6
		Soil Science 200	3
		Forestry 204	4
		Forest Harvesting 260	3
		Forest Harvesting 262	4
		Elective	3
		Physics 170	3
			38
		Forest Harvesting 263[1]	2

Third Year		Fourth Year	
Forestry 237	3	Forestry 332	3
Forestry 238	3	Forestry 333	3
Forestry 305	3	Forestry 395	3
Forestry 306	3	Forestry 421	3
Forestry 308	2	Forestry 442	3
Forestry 309	2	Forest Harvesting 459	3
Forestry 325	3	Forest Harvesting 463	3
Forestry 327	2	Forest Harvesting 464	3
Forest Harvesting 359	3	Forestry 497	3
Forest Harvesting 362	3	Forestry 445	1
Forest Harvesting 363	3	Wood Science Elective	3
Forestry 385	2	Elective	3
English 301	3	Forestry 386	2
Civil Engineering 230 *or* Wood Science 376	3		
	38		36
Forestry 351[2]	3	Forestry 451[3]	6

Footnotes:

[1]Held in the week preceding second year.
[2]Seven days of field study prior to start of fall term in third year.
[3]Eighteen working days of field study at the University Research Forest immediately following spring examination period of third year.

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF FORESTRY (continued)

Wood Science and Industry

New WOOD 448 (3 credits) Summer Work Report

Changes
WOOD 280 - change in title, description, hours, credits to: (3)
WOOD 353 - change in description, credits to: (2)
WOOD 374 - change in title, description, hours, credits to: (3)
WOOD 377 - change in title, description, hours
WOOD 461 - change in hours, term
WOOD 473 - change in credits to: (4)
WOOD 484 - change in description, prerequisites

Change in Program

"Wood Science and Industry Major B.Sc. (Forestry)

...

The program consists of a minimum of 126 credits of in-session and 5 credits of extra-sessional course work (Total 131 credits).

No later than the end of the spring term of the second year, each student will be required to select one of three Areas of Concentration. Each of these sequences of courses is designed to broaden the student's knowledge in one of three specific areas: Forestry, Business Management or Science and Engineering. The Forestry sequence should permit a graduate to qualify for registration in the Association of British Columbia Professional Foresters upon completion of additional requirements. The Business Management sequence which has been drawn up in cooperation with the Faculty of Commerce and Business Administration, is designed for the student interested in the business and financial aspects of the forest products industry. The Science and Engineering sequence allows students interested in mill operation, research and product development to expand their background appropriately, and it is recommended for those students contemplating a post-graduate degree in Wood Science."

AREAS OF CONCENTRATION
(Applies to Wood Science & Industry Only)

1. **FORESTRY**

Second Year required course:	Commerce 296 or 457
Third and Fourth Years 19 to 23 credits from:	Soil Science 200, Forestry 204, 237, 238, 305, 306, 319, 325, 415, Harvesting 262, 263.

2. **BUSINESS MANAGEMENT**

Second year required courses:	Commerce 296 and 457.
Third Year required courses:	Commerce 297, 329, 396, 458.
Fourth Year Electives:	3 to 5 units from Commerce 341, 349*, 392, 393, 394, 397, 491; Forestry 419, Economics 201, 301, 302, 355, 360, 361, 365, 370, 371; Law 356, or other approved courses.

*with permission of instructor

3. **SCIENCE AND ENGINEERING**

Second year required course:	Commerce 296 or 457, Physics 236
Third and Fourth Year Electives:	9 to 17 units from Chemistry 205, 311, 330, Civil Engineering 230, Applied Science 278; Chemical Engineering 470, 471; Biology 102, 200, 201, 351, 352; Forestry 430, 431; Wood Science 377, 470, 476, Mathematics 152, 200, 221; Physics 175, Computing Science 118, 210; Electrical Engineering 256, 259, 380; or other approved courses.

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF FORESTRY

Wood Science and Industry (continued)

Students entering from senior secondary school

First Year	Credits	Second Year	Credits
Mathematics 100, 101	6	Economics 100	6
Physics 110	6	Chemistry 103, 110 or 120[2]	6
or Biology 101 or 102		Physics 170	3
English 100	6	English 301	3
Forestry 111	6	Wood Science 280	3
Forestry 131	3	Forestry 332	3
Forestry 132	3	Wood Science 372	3
		Wood Science 374	3
Area of Concentration	3-9	Area of Concentration	3-9
TOTAL	33	TOTAL	33

Third Year	Credits	Fourth Year	Credits
Chemistry 230	6	Forestry 445	1
Wood Science 335	3	Wood Science 461	2
Wood Science 371	3	Wood Science 473	4
Wood Science 376	3	Wood Science 482	3
Wood Science 484	3	Wood Science 487	3
Area of Concentration	12	Wood Science 488	3
TOTAL	30	Forestry 498[4](497)	6(2)
		Area of Concentration	8(12)
		TOTAL	30
Wood Science 353[3]	2	Wood Science 448[5]	3

Footnotes:

[1]Select the one not taken at grade 12 level.
[2]If CHEM 103 or 110 has been taken in the first year another course will be substituted.
[3]Six working days of on-site study of forest products manufacturing plants during a one-week period immediately following spring examinations of second or third year.
[4]Number of units will be determined by whether Forestry 497 or 498 is selected.
[5]All students proceeding to Fourth Year must submit a report based on their summer work experience in the forest industry, no later than the second Monday in October. This report must have a minimum of 5000 words exclusive of bibliography and appendices.

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF FORESTRY

Wood Science and Industry (continued)

Students entering from First Year Science (or its equivalent)

First Year	Credits	Second Year	Credits
English 100	6	Economics 100	6
Mathematics 100, 101	6	Wood Science 280	3
Chemistry 103 or 110	6	Physics 170	3
Biology 101 or 102	6	Forestry 111	6
or Physics 110	6	Forestry 131	3
ELECTIVE	6[1]	Forestry 132	3
		Wood Science 372	3
		Wood Science 374	3
TOTAL	30		
		Area of Concentration	3-9
		TOTAL	33

Third Year	Credits	Fourth Year	Credits
English 301	3	Forestry 445	1
Forestry 332	3	Wood Science 461	3
Forestry 333	3	Wood Science 473	5
Chemistry 230	6	Wood Science 482	3
Wood Science 335	3	Wood Science 487	3
Wood Science 371	3	Wood Science 484	3
Wood Science 376	3	Forestry 498 (497)	6 (2)[3]
Area of Concentration	6		
		Area of Concentration	9-13
TOTAL	30	TOTAL	33
Wood Science 353[2]	2	Wood Science 448[4]	3

Footnotes:

[1]Recommended elective is Biology 101 or 102, if not taken at Grade 12 level, otherwise elective recommended is Economics 100.

[2]Six working days of on-site study of forest products manufacturing plants during a one week period immediately following spring examinations of second or third year.

[3]Number of credits will be determined by whether Forestry 497 or 498 is selected.

[4]All students proceeding to Fourth Year must submit a report based on their summer work experience in the forest industry, no later than the second Monday in october. This report must have a minimum of 5000 words exclusive of bibliography and appendices.

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF GRADUATE STUDIES

Masters Programs in Oral Medicine, Oral Pathology, and Oral Radiology

M.Sc. Dental Science

Revised Calendar Statement

"Dental Science - M.Sc. Degree (See also Oral Biology - Ph.D. Degree)
(p. 146, col. 2, 1990/91 Calendar)

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Program

The Faculty of Dentistry offers facilities ...

In addition, the program provides an opportunity for qualified students to enter combined programs leading to both certification in either Periodontics, Oral Medicine, Oral Pathology or Oral Radiology (for which diplomas are awarded), and an M.Sc. in Dental Science. The application deadline for the combined programs is October 1.

An essential prerequisite ...".

New courses	OMSS 513 (6)	Oral Medicine I
	OMSS 516 (2)	Oral Radiology
	OMSS 517 (6)	Advanced Oral Radiology
	OMSS 523 (4)	Oral Medicine II
	OMSS 545 (2)	Oral Pathology

FACULTY OF MEDICINE

Medical Genetics

Change MEDG 420 - change in title and description

Surgery

Deletion SURG 410

SCHOOL OF NURSING

New NURS 340 (0) Work-Study Experience

Change NURS 445 changed from "required" to "optional"

December 12, 1990

APPENDIX 'B'

Course and curriculum proposals (continued)

FACULTY OF SCIENCE

Astronomy

Deletion	Astronomy 315	
New	Astronomy 101 (6)	Solar System and Stellar Astronomy
	Astronomy 102 (6)	Extra-galactic Astronomy and Cosmology
	Astronomy 316 (6)	The Solar System
	Astronomy 317 (6)	The Planets
Change	Astronomy 310 - change in description	

Program change

Major - First Year

Chemistry 120 or 110	(6)
Mathematics 100, 101 (120, 121)	(6)
Physics 120 or 115, or 110	(6)
English 100	(6)
Elective[1]	(6)
	(30)

[1]Students wishing to preserve entry into a Geophysics program should take GEOP 120 plus one of GEOL 125 or Geog 200 and postpone the Arts elective until third year.

Major - Second Year

(Admissions requirement: 60% Standing in first year Physics course or permission of Department Head)

Mathematics 200, 221	(9)
Physics 200, 203, 209	(9)
Elective[2]	(6)
Arts Elective	(6)
	(30)

[2]Recommended: ASTR 200 (6), unless credit obtained previously for ASTR 101/102

Major - Third Year

Astronomy 302, 303	(6)
Physics 206, 301, 308	(9)
Mathematics 201	(3)
Mathematics 316 or Physics 312	(3)
Arts elective	(6)
Electives[3]	(3)
	(30)

[3]Recommended: CPSC 111 (3), 118 (3), or 124 (3)

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF SCIENCE (continued)

Atmospheric Science

Changes ATSC 200, 300 - change in title and description

Biology

Changes
BIOL 343, 410 - change in title, hours and description
BIOL 345 - change in title and description
BIOL 346 - change in title
BIOL 351 - change in description and hours
BIOL 400 - change in description
BIOL 403 - change in title
BIOL 427 - change in credits, description and hours

New BIOL 457 (3) Insect Physiology

Chemistry

Changes
CHEM 201 - change in description and hours
CHEM 202 - change in hours
CHEM 402 - change in course number and prerequisite (formerly 306)
CHEM 405 - change in description and prerequisite

New CHEM 213 (6) Organic Chemistry

Program changes

1. Pharmacology Major program, Second Year, change CHEM 230 (or 203) to: CHEM 213 (or 203, or 230)

2. Pharmacology Honours program, Second Year, change CHEM 203 to: CHEM 213 (or 203)

3. Nutritional Sciences Major program, Second Year, change CHEM 230 (or 203) to: CHEM 230 (or 213 or 203)

4. In the prerequisite, corequisite and/or credit restriction statements of the following courses (Calendar, Courses of Instruction section), change CHEM 230 or 203 to: CHEM 230 or 213 or 203.

   BIOC 300, 302, 303, 400
   BIOL 200, 201, 334, 350, 439
   CHEM 230, 313, 330, 335, 406, 412
   PCTH 300
   PHYL 301

5. Change Chemistry Pairing List to read:

   6. CHEM 203, 213, 230, 260

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF SCIENCE (continued)

Computer Science

New CPSC 128 (3) Principles of Computer Science

Changes CPSC 126 - change in description
CPSC 152 - change in number, title, description and hours (formerly 151)
CPSC 216 - change in number, title, description, prerequisite and hours (formerly 210)
CPSC 218 - change in number, description, prerequisite, hours (formerly 213)
CPSC 220 - change in description and prerequisite

Program changes

It is understood and agreed that in all programs that specify CPSC 210 and 213, either as requirements or electives, the new specification will be CPSC 216 and 218, respectively. In the Faculty of Arts List B, CPSC 210 and 213 should be replaced by CPSC 216 and 218. Effective September 1992: Alter prerequisites for 300- and 400-level CPSC courses to map CPSC 216 onto CPSC 210 and CPSC 218 onto CPSC 213.

Change in Calendar Statement:

Note: Students wanting a comprehensive introduction to Computer Science as a discipline should take CPSC 124 and 126. CPSC 124 alone is not recommended. Students who already have credit for CPSC 116 or 118 may take CPSC 128 in place of CPSC 124 and 126. CPSC 100, 111 and 118 are intended for students who do not plan to pursue degree programs in the Department of Computer Science. CPSC 114, 116 and 151 are no longer offered. Credit for CPSC 116 is equivalent to credit for CPSC 118. Students may NOT obtain credit for more than one of CPSC 100, 111, 114, 124, 151 and 152. Consult the Department for further information.

(Second paragraph is unchanged)

Geography

Changes GEOG 200, 300 - change in title and description

Geological Sciences

Change GEOL 418 - divide into two courses:

GEOL 419 (3) Mineral Deposits I
GEOL 420 (3) Mineral Deposits II

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF SCIENCE (continued)

Geophysics

Deletions GEOP 221, 315, 425

Changes
GEOP 120 - change in title and description
GEOP 310, 321 - change in description
GEOP 320 - change in description and prerequisite
GEOP 322 - change in title, description and hours
GEOP 421 - change in credits, description and hours

New
GEOP 230 (3) Geophysical Fields and Fluxes I
GEOP 231 (3) Geophysical Fields and Fluxes II
GEOP 232 (3) Introduction to Experimental Geophysics
GEOP 316 (3) The Solar System
GEOP 317 (3) The Planets

Program changes

Honours Astronomy and Geophysics
- Focus Planetary Sciences (365 - GEPA)
First Year

Chemistry 110 or 120	(6)
Mathematics 100, 101 (120, 121)	(6)
Physics 120 or 115 or 110	(6)
English 100	(6)
Geophysics 120	(3)
Elective[1]	(3)
	(30)

[1]Strongly recommended: ASTR 101 or 102, GEOL 125, or GEOG 200. N.B. Special arrangements may be made for students unable to complete GEOP 120 in first year.

Major - First Year

Geophysics 120	(3)
Elective[1]	(3)
Chemistry 120 or 110	(6)
Mathematics 100, 101 (120, 121)	(6)
Physics 120 or 115 or 110	(6)
English 100	(6)
	(30)

[1]Strongly recommended: ASTR 101, 102, GEOL 125, GEOG 200. Special arrangements may be made for students unable to complete this requirement in first year.

APPENDIX 'B'

Course and curriculum proposals

FACULTY OF SCIENCE (continued)

Geophysics

Program changes (continued)

Honours - First Year

Geophysics 120	(3)
Elective[1]	(3)
Chemistry 120 or 110	(6)
Mathematics 100, 101 (120, 121)	(6)
Physics 120 or 115 or 110	(6)
English 100	(6)
	(30)

[1]Strongly recommended: ASTR 101 or 102, GEOL 125, or GEOG 200. N.B. Special arrangements may be made for students unable to complete GEOP 120 in first year.

Major - Second Year

Geophysics 230, 231, 232	(9)
Computing Science 111	(3)
Mathematics 200, 221, 315	(9)
Electrical Engineering 263	(3)
Arts elective	(6)
	(30)

Major - Third Year

Geophysics 320, 321, 322	(9)
Geophysics-Astronomy 316 or 317	(3)
Mathematics 201	(3)
Physics 311, 319	(6)
Physics 312 or Mathematics 316	(3)
Electives[2]	(6)
	(30)

[2]Electives distributed between third and fourth years, must include at least 8 credits from upper level Geophysics, Physics, Mathematics or Astronomy courses and at least 3 credits of Geology courses at the 200-level or above. Other recommended electives are ATSC 301, 302, 411, 414 and OCGY 308, 411 (same as ATSC 411), 414 (same as ATSC 414).

Major - Fourth Year

Geophysics 420, 421, 426	(12)
Electives[2]	(12)
Arts elective	(6)
	(30)

[2]Electives distributed between third and fourth years must include at least 8 credits from upper level Geophysics, Physics, Mathematics or Astronomy courses and at least 3 credits of Geology courses at the 200-level or above. Other recommended electives are Atmospheric Sciences 301, 302, 411, 414 and Oceanography 308, 411, (same as ATSC 411), 414 (same as ATSC 414).

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF SCIENCE (continued)

Mathematics

Deletions MATH 224, 301, 311, 321, 323, 357, 413, 423, 425, 426

Changes

MATH 300 - divide into two courses:
MATH 300 (3) Introduction to Complex Variables
MATH 301 (3) Applied Analysis

MATH 320 - divide into two courses:
MATH 320 (3) Real Variables I
MATH 321 (3) Real Variables II

MATH 322 - divide into two courses:
MATH 322 (3) Fundamental Concepts of Algebra I
MATH 323 (3) Fundamental Concepts of Algebra II

MATH 400 - divide into two courses:
MATH 400 (3) Applied Partial Differential Equations
MATH 401 (3) Green's Functions and Variational Methods

MATH 418 - divide into two courses:
MATH 418 (3) Probability
MATH 419 (3) Stochastic Processes

MATH 420 - divide into two courses:
MATH 420 (3) Real Anaylsis I
MATH 421 (3) Real Analysis II

MATH 422 - divide into two courses:
MATH 422 (3) Algebra I
MATH 423 (3) Algebra II

MATH 424 - divide into two courses:
MATH 424 (3) Classical Differential Geometry
MATH 425 (3) Introduction to Modern Differential Geometry

MATH 335, 340 - change in description
MATH 441 - change in number and description (formerly 341)
MATH 442 - change in number (formerly 342)
MATH 428 - change in number (formerly 427)
MATH 429 - change in number and prerequisite (formerly 428)

New

MATH 312 (3) Introduction to Number Theory
MATH 313 (3) Topics in Number Theory
MATH 331 (3) Problem Solving
MATH 402 (3) Calculus of Variations
MATH 403 (3) Stabilization and Optimal Control of Dynamical Systems

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF SCIENCE

Mathematics (continued)

New	MATH 414	(3)	Introduction to Set Theory
	MATH 415	(3)	Introduction to Mathematical Logic
	MATH 416	(3)	Ordinary Differential Equations
	MATH 417	(3)	Partial Differential Equations
	MATH 426	(3)	Introduction to Topology
	MATH 427	(3)	Topics in Topology
	MATH 440	(3)	Complex Analysis

Program changes - Mathematics and Honours Programs

Honours program - change No. 2 through 5:

2. To be admitted into an Honours Mathematics program, a student must obtain at least a second-class mark in MATH 121 or a first-class mark in MATH 101 and a first-class average in MATH 100/101. To remain in Honours Mathematics, a student must maintain an overall second-class average.

3. The following Mathematics courses are intended primarily for Honours students in Mathematics and other fields: MATH 120, 121, 220, 223, 226, 227, 300, 301, 320-323, 331, 400-403, 416-429, 440.

4. Students are encouraged to choose electives that result in studying another subject to substantial depth.

5. For students who plan graduate work in Mathematics, study in French, German or Russian is recommended.

Combined Honours (10) in Mathematics and another subject

First Year	Second Year
Same as Mathematics Honours	Same as Mathematics Honours

Third and Fourth Years

Mathematics 320 and 321	(6)[1]
9 credits chosen from Mathematics 300, 301, 316, 322, 323, 331	(9)[1]
12 credits chosen from Mathematics 400-403, 414-429, 440, 449	(12)[1]
Arts elective	(6)
Electives	(33)[2]
	(66)

[1]A second-class overall average is required in these 27 credits to obtain an Honours Mathematics degree.
[2]Including courses as specified by the other Department, but not exceeding 30 credits in 3rd and 4th year.

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF SCIENCE

Mathematics

Program changes - Mathematics and Honours Programs (continued)

Mathematics (570) Honours (10)

First Year

Mathematics 120, 121 (100,101)	(6)
Physics 120 (115 or 110)	(6)
Chemistry 120 (110)	(6)
English 100	(6)
Elective[1]	(6)
	(30)

Second Year:

Mathematics 223 or 221	(3)
Mathematics 226 or 200[2]	(3)
Mathematics 227 or 201	(3)
Mathematics 220[2]	(3)
Mathematics 315[3]	(3)
Computer Science 124, 126 (118)[4]	(3-6)
Arts elective	(6)
Electives[5]	(9-12)
	(36)

Third and Fourth Years

Mathematics 300, 320, 321, 322, 323	(15)[6]
15 credits chosen from Mathematics 400-403, 414-429, 440, 449[7]	(15)[6]
9 additional credits of Mathematics courses numbered 300 or above	(9)
12 credits of courses in the Faculty of Science numbered 300 or above[8]	(12)
Arts elective	(6)
Electives	(9)
	(66)

[1]It may be convenient to take Computer Science 124/126 at this stage.

[2]Students obtaining a second-class mark in MATH 226 are not required to take MATH 220.

[3]May be deferred until the third year.

[4]Computer Science 124/126 highly recommended.

[5]Physics 206 highly recommended.

[6]A second-class overall average is required in these 30 credits to obtain an Honours degree.

[7]MATH 449 is highly recommended.

[8]PHYS 301, 304, CPSC 302, 303, STAT 406 are recommended.

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF SCIENCE

Mathematics (continued)

Other changes affecting Honours Programs:

1. Change the mathematics requirements for third year Honours - Applied Mathematics Option (575 MAAP) (page 248, column 2):

from (units)		*to (credits)*	
MATH 300, 320, 323	(9)	MATH 300, 301, 316, 320, 321	(15)
		Electives	(3)

Also, renumber some Mathematics courses in the lists for the various concentrations: MATH 400 -> MATH 400,401; MATH 426 -> MATH 402, 403; MATH 418 -> MATH 418, 419; MATH 420 -> MATH 420, 421.

2. Change the mathematics requirements for third and fourth years of Combined Chemistry and Mathematics Honours (listed under Chemistry - page 244, column 1):

from (units)		*to (credits)*	
Third Year		**Third Year**	
MATH 320	(3)	MATH 320, 321	(6)
two of MATH 321, 300, 322, 323	(6)	9 credits chosen from MATH 300, 301, 316, 322, 323, 331	(9)
		Electives	(3)
Fourth Year		**Fourth Year**	
Approved Mathematics electives chosen from MATH 400,418 420,422-426	(6)	12 credits chosen from MATH 400-403,414-429,440-449	(12)

3. Change the mathematics requirements for third and fourth years of Combined Computer Science and Mathematics Honours (listed under Computer Science - page 245, column 2):

from (units)		*to (credits)*	
Third Year		**Third Year**	
MATH 320, 323	(6)	MATH 316, 320, 321	(9)
one of MATH 300, 322	(3)	6 credits chosen from MATH 300, 301, 322, 323, 331	(6)
		Electives	(3)
Fourth Year		**Fourth Year**	
Six units from Mathematics 400,418,420,442-428	(6)	12 credits chosen from MATH 400-403,414-429,440,449	(12)

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF SCIENCE

Mathematics

Other changes affecting Honours Programs: (continued)

4. Change the mathematics requirements for third and fourth years of Combined Physics and Mathematics Honours (listed under Physics - page 252, column 1):

from (units)		*to (credits)*	
Third Year		**Third Year**	
MATH 300, 320, 323	(9)	MATH 300, 301, 316, 320, 321	(15)
		Electives	(3)
Fourth Year		**Fourth Year**	
Additional mathematics: 6 units of approved 4th year courses	(6)	12 credits chosen from MATH 400-403,414-429,440,449	(12)

5. Change the mathematics requirements for third and fourth years of Combined Mathematics and Statistics Honours listed under Statistics - page 254, column 1):

from (units)		*to (credits)*	
Third Year		**Third Year**	
MATH 303, 320	(4.5)	MATH 303, 320, 321	(9)
two of MATH 300, 321 322, 323	(6)	9 credits chosen from MATH 300,301, 316, 322, 323, 331	(9)
		Electives	(3)
Fourth Year		**Fourth Year**	
6 units from Mathematics 400,418,420,422-426	(6)	12 credits chosen from MATH 400-403,414-429,440,449	(12)

6. Replace conditions (1), (2), and (3) in the description of the Honours Mathematics Option of the Electrical Engineering Program (listed under Electrical Engineering - page 61, column 1) as follows:

   (1) obtaining second class in MATH 226/227 or MATH 253/254. (MATH 220 is recommended for students taking MATH 253/254.)

   (2) obtaining second class overall standing in MATH 300 and 301 (instead of 350), 320, 321, 400, 401, and 3 additional credits chosen from MATH 322, 323, 402, 403, 416-429, 449.

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF SCIENCE (continued)

Microbiology

Changes
MICB 307 - change in title, description and hours
MICB 400 - change in description
MICB 403 - change in title, description and hours
MICB 421 - change in title, credits, description and hours

Program change

Change Program to:

Majors
Fourth Year

Microbiology 421	(3)
12 credits from:	
Microbiology 307, 318, 400, 402, 403 408, 409, 418, 419, 430, 448	(12)
Electives	(15)
	(30)

Honours
Fourth Year

Microbiology 421	(3)
Microbiology 430	(6)
Microbiology 449	(6)
6 credits from:	
Microbiology 307, 318, 400, 402, 403, 408, 409, 418, 419	(6)
Electives	(15)
	(36)

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF SCIENCE (continued)

Oceanography

Changes
OCGY 310 - change in title and description
OCGY 406 - change in title

Physics

Changes
PHYS 140 - change in title and description
PHYS 301, 308, 405 - change in description
PHYS 305 - change in prerequisite
PHYS 311 - change in corequisite
PHYS 318 - change in description and prerequisite
PHYS 449 - change in hours

New
PHYS 436 (3) Health Physics Measurement and Control

Program changes

Requirements for the B.Sc. degree:

Major (30)

Add footnote 1 to First Year: Physics 120, 115 or 110[1]:
[1]PHYS 115 or preferably PHYS 120 is recommended.
Renumber existing footnotes 1-3 as 2-4.

Honours (10)

Change footnotes as follows:

In First Year: Physics 120, 115 or 110[1]

In Second Year: Physics 200, 206[123], Physics 203[2], 209[2], MATH 200, 201[3]; Science Elective[34]

[1]PHYS 120 is recommended. Students without PHYS 120 will usually substitute PHYS 216 for PHYS 206.

[2]PHYS 213, 215, 216 with First Class standing may be substituted for PHYS 203, 206 and 209 respectively.

[3]PHYS 206, MATH 201 or 3 credits of electives may be postponed to Third Year.

[4]At least one course in Computer Science is recommended.

In Fourth Year: Renumber existing footnotes 4 and 5 to 5 and 6 respectively.

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APPENDIX 'B'

Course and curriculum proposals

FACULTY OF SCIENCE

Physics (continued)

Change in Calendar statement:

Courses primarily for first-year Science students - replace second and third paragraphs with:

PHYS 110, PHYS 115 or PHYS 120 is the normal prerequisite for admission to science programs and to the Faculty of Applied Science, and, along with MATH 100 and 101 (or 120 and 121) is prerequisite to all Physics courses except PHYS 340 and 341. Credit will be given...another institution.

Students planning to go into Applied Science or the physical sciences are encouraged to take PHYS 115 or, preferably PHYS 120. Admission to the Second Year Honours Physics program generally requires PHYS 120 and a clear First Year pass with either overall Second Class standing in 30 credits or at least Second Class standing in each of PHYS 120, MATH 100 and 101, and a First Year Chemistry course. However,...were also met.

Delete paragraph 7. Students who would prefer...

Physiology

Program change

Second Year

Biology 200, 201	(6)
Chemistry 205, or 201 and 202	(6)
Chemistry 213 (or 203)	(6)
Mathematics 200	(3)
Microbiology 200	(6)
Arts elective	(6)
Science elective	(3)
	(36)

Statistics

Change STAT 203 (3) Statistical Methods I - change course credit restriction to:

Credit will be given for only one of STAT 203, STAT 105 and STAT 200. Students who have taken MATH 100 are advised to take STAT 200 rather than STAT 203.