Scarborough College/University of Toronto/1969-70 Calendar


The Academic Calendar 1969-70


| 1 | July | Tuesday | Dominion Day |
| :---: | :---: | :---: | :---: |
| 10 | July | Thursday | Applications for supplemental examinations must be received by this date |
| 4 | August | Monday | Civic Holiday |
| 15 | August | Friday | Last day of summer session lectures |
| 15 | August | Friday | Applications for admission of Special Students must be submitted by this date |
| 18 | August | Monday | Supplemental and summer session examinations commence |
| 1 | September | Monday | Labour Day |
| 11 | September | Thursday | Registration of First Year Metro Toronto Residents <br> A - G 9 a.m. to Noon <br> H-L 2 p.m. to 4 p.m. |
| 12 | September | Friday | Registration of First Year Metro Toronto Residents M-Se 9 a.m. to Noon Sf - Z 2 p.m. to 4 p.m. |
| 15 | September | Monday | Academic Year begins: President's Opening Address, Convocation Hall 2 p.m. |
| 15 | September | Monday | Registration of First Year from Outside Metro Toronto <br> A - M 9 a.m. to Noon <br> $\mathrm{N}-\mathrm{Z} 2$ p.m. to 4 p.m. |
| 16 | September | Tuesday | Registration Second Year A - G 9 a.m. to Noon H-L 2 p.m. to 4 p.m. |


| 17 | September | Wednesday | Registration Second Year <br> M-Se 9 a.m. to Noon <br> St - Z 2 p.m. to 4 p.m. |
| :--- | :--- | :--- | :--- |
| 18 | September | Thursday | Registration Third Year <br> A-I 9 a.m. to Noon <br> J-R 2 p.m. to 4 p.m. |
| 19 | September | Friday | Registration Third Year <br> S-Z 9 a.m. to Noon |
| 20 | September | Saturday | The late registration penalty will be enforced |


| 19 | December | Friday | Last day for transfer to a part-time <br> program without academic penalty |
| :--- | :--- | :--- | :--- |
| 25 | December | Thursday | Christmas Day |
| 1 | January | Thursday | New Year's Day |
| 5 | January | Monday | Second term classes commence at 9 a.m. |
| 16 | January | Friday | Applications for Scarborough College <br> bursaries must be submitted by this date |
| 20 | January | Tuesday | Second term instalment of fees must be <br> received by this date |
| 30 | January | Friday | Course changes (spring-term courses only) <br> must be made by this date |
| 13 | February | Friday | Saturday <br> Applications for second-half assistance <br> from Ontario Students Awards (OSAP) must <br> be submitted by this date |
| 13 | April withdrawal from an extra |  |  |
| course without academic penalty |  |  |  |



## General Information

THE COLLEGE IN THE UNIVERSITY
Scarborough College is one of the eight colleges of the University of Toronto. It offers programs leading to the University of Toronto's Bachelor of Arts and Bachelor of Science degrees. Arrangements also exist under which qualified students may proceed towards graduate degrees or may transfer into professional faculties of the University such as Medicine, Dentistry or Pharmacy

As members of a College of the University of Toronto, Scarborough students have many advantages. They work towards highly regarded University of Toronto degrees. They may participate in University-wide social, cultural, and athletic activities. And they may draw on the University's central library, the largest university library in Canada. Yet, in a semi-rural environment, students study in a smaller, more personal and more humane community. They have more ready and more frequent associations with members of the faculty. They draw on the College's own library which is designed for its own undergraduate courses. And they participate in social, cultural and athletic activities on a smaller scale and in a more friendly atmosphere and take part in building a new, experimental College organization.
Similarly, faculty members with highest qualifications have joined the College because of the advantages offered by simultaneous membership in the larger University of Toronto and the smaller
Scarborough College communities. The University of Toronto offers them
the advantages of affiliation with an internationally reputed institution, excellent research facilities and the opportunity to offer advanced-level instruction to graduate students of the University. Further, Scarborough College offers them a more closelyknit academic community, with wide inter-disciplinary associations, with ready access to students and with teaching-aid equipment that is amongst the best in the country.

It is upon this basis - this unique combination of advantages of the large, established university and the smaller, more personal innovating college - that Scarborough College is endeavouring to develop as a unique institution of higher education.

Students as well as staff are, to a rapidly increasing extent, participating in the general management and direction of College affairs, for example through the Curriculum Committee, the Library Committee, the Counselling, Awards and Admissions Committee and the Housekeeping Committee. For some months (as we go to press) a joint committee of staff and students has been reviewing "Student
Participation in Scarborough College Government". It reports to the Faculty Council and the Student Council.

The College building overlooks Highland Creek near the eastern limit of Metropolitan Toronto, some twenty miles from the University's St. George campus in the centre of the city. The campus covers more than two hundred acres of valley, ravine and plateau land, much of it wooded. The building, including its inner academic design, is widely recognized as one of the outstanding

examples of modern university architecture in North America.

## LIBRARY AND STUDY AREAS

For a college its size, Scarborough has an exceptionally large and wellequipped library - nearly 100,000 volumes. Students have direct access to the books, which have been selected to support the courses offered in the College, and an expert staff of librarians is on hand to help students make good use of what is available.
The collection of current periodicals is also large and diverse - nearly 1,000 titles including publications of general interest and of academic specialization.
In addition to borrowing from the College library collection
Scarborough staff and students are entitled to use and also to draw on the collection of the University of Toronto's main library. There is a regular book delivery service from the main library to the Scarborough library.
The study space in the College library is equipped with individual study carrels and comfortable armchairs. Lending, reference and study facilities are open until ten o'clock each weekday during the school year, and until five o'clock on Saturdays. Longer library hours, including Sunday service, are being tried out.
Extensive study areas outside of the library are also equipped with individual carrels. These study areas are available for students at any hour during the school year
Library policy is guided by a committee which includes students as well as faculty

TELEVISION AND CINEMA
Scarborough College is equipped with one of the finest closed-circuit, educational television facilities in the world and it has been in the forefront of experimentation with television as an instructional instrument for higher education.
The College is now pioneering in the production of "enrichment programs", to supplement regular courses. These programs are produced where a lecturer feels that he would be able to communicate his information better, from an educational point of view, through the television medium than through a conventional lecture.
With the growing flexibility of the College curriculum students are no longer required to take televised lecture courses

Among the notable programs produced at the College in 1968-69 have been dramatizations and readings by professional actors to enrich literature courses, programs made from film records of field trips by a geographer and an anthropologist, and a series of programs on human physiology.

A student TV club has itself produced a number of programs including both public affairs and feature presentations. Another club has concentrated on the production and presentation of movies in the College

## STUDENT ACTIVITIES

Students of the College have participated in the widest range of

activities, from high policy decisions to the more traditional "student affairs", both social and athletic

On the policy level, students have been involved during the past year in all major decisions. They played an active part on the committee that has developed the new curriculum to which so many of the following pages of this Calendar are devoted and on another committee concerned with the counselling program required by the wide range of choices offered by that curriculum. Students have been members of the committee engaged in selecting a new Registrar. At the close of each academic year the Student Council sponsors a program of course evaluations. And the Council has taken a particularly active part in the drive for residential accommodation designed to transform what might otherwise become simply a "commuter college" into a wellrounded academic community.

Turning to more work-a-day affairs, students have participated in decisions relating to the daily routine of College life: the food offered in the cafeteria, the disposition of vending machines, the location and control of study areas, the facilities offered by the library, the College bus service, the parking arrangements, and so forth. They have operated a coffee-shop, produced two radically different student newspapers and a literary review, created television programs and cinema documentaries, run a drama club, organized a College art exhibition and arranged for visiting exhibitions, formed special-interest clubs, invited visitors ranging from
local folk-singers to world-famous poets, promoted blood-donor clinics for the Red Cross, organized a profitable "slave market" on behalf of overseas students, offered "Scarborough Fair" including free food and drink to introduce students from the central (St. George) campus of the University to the special attractions of Scarborough, and put on dances and parties, both formal and informal, at the College and elsewhere.

The Scarborough College Student Council has played a leading role in many of these activities. Through its participation in the Students' Administrative Council of the University of Toronto it has been associated with the broader movements of student activities in Toronto, in Canada and abroad. Scarborough otuctents are thly members of the Canadian Union of Students and the World Union of Students.

Much of the participation of students in general College affairs has so far been on an ad hoc basis. In order to study and make recommendations for "constitutional recognition of "Srdent Participation in Scarborough Collage Governmepr" a Joint fornmittee has now beep set up including a balanced representation of students and faculty and members of the College administration.

## RESIDENCES

While plans for College residences are under active consideration, none have yet been built. However, the university has made available four small houses located near the College on land recently purcihased.


20 The College, in association with the Student Council, has thus been able to offer accommodation to about 25 students. So far this accommodation has been offered to men while other arrangements have been made for women in a nearby nurses' residence. Details of what is to be available in 1969-70 may be obtained from the College Registrar.

## ATHLETICS AND RECREATION

Scarborough College students have access to a wide variety of athletic and recreational activities. Scarborough campus facilities include several playing fields, four all-weather tennis courts, a practice golf course, an archery range and a weight training room. Pending the construction of Scarborough's own athletic buildings, extensive use is made of nearby recreation facilities. In 1968-69 two double-gymnasia, a swimming pool, a curling rink and an indoor ice area have been in use for instructional, recreational and competitive activities. As members of the University of Toronto, Scarborough men may also use the facilities of Hart House and Scarborough women those of the Benson Building - both on the central campus.
Highly proficient athletes may compete successfully for membership on University of Toronto ('Varsity") teams. Interfaculty competition is also available for those seeking a high level of performance. In 1968-69 Scarborough College teams and individuals enjoyed considerable success in football, rugger, soccer, lacrosse, hockey, basketball,
volleyball, water polo, track and a number of individual sports. Those interested in less demanding competition participate in an extensive intramural program.
Students are encouraged to take part in sports which can be enjoyed after graduation. Golf, tennis, badminton, horseback riding, karate, fencing, gymnastics, curling, skiing and other individual sports are emphasized. Sailing and rowing are being considered for 1969-70
Students plan and administer the athletic program through the Scarborough College Athletics Association, with the assistance of the Department of Athletics.
The Scarborough College " S " is awarded to both men and women who accumulate sufficient merit points through participation and achievement in athletic programs.

## TRANSPORTATION

Scarborough College is located just south of Highway 401 from Interchange 61 (Morningside Avenue) and two TTC bus lines serve the campus

The College operates buses of its own, free of charge, for two purposes:
(i) The College commuter service designed to assist in rushhour movements, morning and evening. The main service operates between the College and the eastern (Warden Avenue) terminal of the Metropolitan Toronto subway system. Another service operates in the northern area along Sheppard Avenue.
(ii) The Inter-Campus shuttle service designed to move staff and students between the (main)

St. George campus and the
Scarborough campus. These buses operate hourly in each direction beginning at $9.15 \mathrm{a} . \mathrm{m}$. and ending at $4.45 \mathrm{p} . \mathrm{m}$. The trip, which is about 18 miles, takes half an hour.



In 1969-70, Scarborough College will offer for the first time a completely revised and much improved curriculum - the result of three years work by the staff and latterly the students of the College and of the Faculty of Arts and Science. The curriculum is, of course, approved for degree purposes by the Faculty of Arts and Science and by the Senate of the University of Toronto.
The rules of the new curriculum are the same as those of the other Colleges of the Faculty of Arts and Science*. However, the course offerings are distinctive and are designed to suit the talents of the Scarborough faculty members and the interests of Scarborough students.

For students in first and second years, the New Program replaces the General Arts and General Science courses previously offered at the College. Students in third year in 1969-70 will continue in the General Arts or General Science courses, but will find that these courses have been modified considerably in accordance with the ideals of the New Program. In 1970-71, the New Program will come into effect in all academic years.

Beginning in 1971-72, the College intends to offer courses in a number of disciplines to students in their fourth years.
The New Program at Scarborough College is based upon two basic principles: the freedom of the student to plan his own, individual academic program in accordance with his own individual abilities and interests; and the
flexibility for the student to change his academic program in accordance with changes in his intellectual development and intellectual interests.
Each student is encouraged to plan carefully his own individual academic program.
Some students, who have already discovered where their talents and interests lie, will choose in their first year to specialize their studies in one particular discipline such as Mathematics or History or Sociology. Other students, who also have a clear idea of where their talents and interests lie, will choose to concentrate their studies in two or more related disciplines such as Modern Languages and Modern History, or Political Science and Economics, or Mathematics and Physics. Many students, who lack a clear idea of where their abilities and interests lie, will in their first year or two choose a variety of courses. Having explored a number of subjects, they may then discover that they would like to specialize in one or two.

Still other students, seeking a broader background or seeking insights from many points of view, may choose to pursue more generalized programs. Such students will frequently choose to take only one course in any given discipline in each year. Or they may choose (on the pattern of the old General Arts course) to take only
*The official Calendar soon to be published by the Faculty of Arts and Science of the University of Toronto for 1969-70 will contain the definitive text of the Rules and Regulations contained in this chapter.
two courses in a given "major" discipline in each of second and later years, while selecting all other courses from different disciplines.

Many students will choose to specialize, not in a single discipline or pair of disciplines, but in an interdisciplinary area: an historical period, a geographical or cultural area, or a philosophical topic. For example a student might choose to concentrate his studies over one or more years in: modern Europe, the less developed countries, the Renaissance, the city, or the condition of man in mass society.
At Scarborough College, a special effort is being made to develop a wide offering of courses in one interdisciplinary area: the area of Canadian Studies. Students interested in the Canadian Studies Program will be able in1969-70 to select from over twenty courses relating to Canada. These include courses in Anthropology (B4, B10) Economics (A1, B2, B3, B7, B8), French (B16), History (B5, B6, B41, B42), Political Science (A1, B1, B2, $B 5)$, Geography (B4, B5), and Sociology (A2, B4, B10, B13).

Students pursuing specialized programs will generally seek a wider perspective from their education by taking at least one of their courses each year (possibly an extra course) from outside of their area of specialization. And students pursuing generalized programs will usually provide for coherence in their programs by taking, over the course of their years at the College, at least three or more courses in a number of disciplines or related academic areas. A random
"cafeteria choice" of courses should be avoided.
One of the basic principles and primary advantages of the New Program is flexibility. A student entering the University of Toronto is no longer required to decide on entry whether to be an arts or science student, whether to pursue a General Course or a specialized Honours Course, or whether to pursue a three or four year program. The student may now make these decisions at various points in his career as his interests and abilities develop.

Indeed, a student may change his area of specialization as his interests change, or may deliberately decide to pursue more than one area of specialization, changing his area of specialization from year to year.

On the other hand, students with clearly defined aims and developed interests are not prevented from following these aims and interests from the beginning.

Finally, many students will design their programs in such a way as to qualify them for futher studies in a professional field. Students who pursue one year of study at the College, achieving high academic standing and completing given pre-requisite courses, may qualify for admission to the first year in the Faculty of Dentistry and second year in the Faculty of Pharmacy. Students who complete two years of study at the College with excellent academic standing and completing given pre-requisite courses may qualify for admission to the first professional year of the Faculty of Medicine. The

26 pre-requisite courses to be required by each of these Faculties are now being decided, and this information will be made available to
Scarborough students by the academic counsellors of the Division of Science and by the Registrar's Office

Finally, students may seek to qualify to take, at the Ontario College of Education, the basic course for the Interim High School Assistants Certificate, Type A or Type B. Information concerning certification requirements will be made available by Divisional academic counsellors and by the Registrar's Office

## ASSISTANCE IN PLANNING INDIVIDUAL PROGRAMS

To use wisely the freedom to construct individual programs, students must have available, and should frequently consult, ready sources of information and assistance. Consequently, the College's counselling program is an essential service to students in the New Program

Students will wish to consult members of the College faculty and will wish to consult more experienced students concerning many important matters. Faculty members will be able to advise students as to which courses might best be taken to pursue a given interest, to supplement courses in a field of specialization, or to prepare a student for further study or for an occupational field. For example, a student interested in doing specialized work in Psychology may
be advised to take courses in Biological Science (Human Physiology) and in Mathematics (Statistics) in order to supplement and complement his courses in Psychology. Or a student interested in winning admission to the Faculty of Medicine may be advised to take certain science courses which are required for admission to that Faculty and certain other courses which would be helpful to a person who would be studying medicine More advanced students will be able to advise newer students about the methods of teaching in various courses.

Academic counselling of two types is offered by the College. At a number of occasions during the academic year, but particularly during the pre-registration and registration periods, group counselling sessions will be held. At these sessions faculty members, senior students, and newer students will have the opportunity to discuss informally, matters of academic interest. Both large, divisional group sessions and also smaller group sessions are planned.

Secondly, at least one faculty member in each discipline will be avaliable throughout the year to counsel individuals on academic and other matters. Students are always welcome to discuss matters relating to an individual course with the faculty member who teaches that course.

In addition, members of the Office of the Registrar are available to counsel students on the academic rules and on other matters.


## THE NEW PROGRAM

## (a) FIRST YEAR PROGRAM:

To complete a first year program, a student must obtain standing in five courses. Descriptions of the courses available are to be found in the next section of this calendar. At Scarborough College, a first year student may select any course for which he satisfies the pre-requisite and co-requisite requirements. (A pre-requisite is a course which must be passed before a student can take a given course. A co-requisite is a course which must be passed before or taken at the same time as a given course.)
(b) SECOND YEAR PROGRAM:

To complete a second year program in 1969-70, a student must: (1) complete his first year program of six courses under the rules of the General Arts and General Science Courses, and (2) obtain standing in five additional courses, at least three of which must be B-level or C-level courses (eleven courses in all). To complete a second year program in the 1970-71 session and subsequent sessions, a student must obtain standing in ten courses, at least three of which must be B-level or C-level courses. The student may select any course for which he meets pre-requisite and co-requisite requirements.
(c) THIRD YEAR PROGRAM: (1970-71)* To complete the third year of the New Program in 1970-71 a student must (1) complete his second. year program (eleven courses); and (2) obtain standing in five additional courses. Of the student's sixteen courses, at least eight must be B-level or C-level courses, and at
least four must be "advanced'" level courses.
To complete a third year program in the 1971-72 session and in subsequent sessions, a student must obtain standing in fifteen courses, at least eight of which must be B-level or C-level courses, and at least four of which must be "advanced" level courses.
(d) THE THREE-YEAR DEGREE:

To obtain a degree a student must complete a third-year program and have a final mark of $60 \%$ or better in each of at least eight of the fifteen courses. Of these eight at least four must be B-level or C-level courses. (e) FOURTH YEAR PROGRAM:Having qualified for a three-year degree a student may go on to a fourth-year program. Scarborough College intends to offer some fourthyear programs beginning in 1971-72 In addition, arrangements are being considered for students to pursue specialized, fourth year work on the central, St. George campus of the University.
(1) STUDENTS REFUSED FURTHER A student in the New Program will be refused further registration in the Faculty if:

- he fails four courses in his first ten attempts and at the time of his fourth failure has an average in all courses attempted of less than $55 \%$, or
- he fails five courses in his first fifteen attempts, or
*The proposals for the third and fourth years of the New Program have been passed only in principle by the Council of the Faculty of Arts and Science. They are subject to amendment in detail during the 1969-70 Session.
- he fails six courses

A student will normally be refused registration in the Faculty for one year if he fails three courses in any year. Failed supplemental examinations in first year do NOT count as second failures.
(g) GENERAL REGULATIONS NEW PROGRAM:
Students will normally be expected to take a full program of studies (five courses) in the winter day-session of each year. With the approval of the College and the Faculty exceptions may be made.
A student may take an extra course or half-course per year. The standing obtained will be recorded on the student's transcript; but it will not count towards meeting degree requirements.
A student may withdraw from his program (winter-day) without academic penalty up to February 15. If exceptional circumstances warran it a student may be permitted, on petition, to withdraw from not more than one course (or two halfcourses) of his program without academic penalty. A student may withdraw without academic penalty and without petition from an extra first term halfcourse before November 15th and from an extra full-course or second term half-course before February 15th.
Credit will be retained for any halfcourse completed and discredit noted for any half-course failed before the date of withdrawal.

THE GENERAL COURSES (THIRD YEAR)
third year general arts:
Students who enter third year General Arts in 1969-70 will continue in the old program but will find the requirements to gain standing have been changed to give them greater freedom of choice. All sequence and group requirements have been removed. The old requirements with respect to concentration have also been removed. Students who wish to do so may continue to take two courses in the subject in which they concentrated in second-year, but they can also take fewer or more courses.

Students may select any five courses, except that: - only one A-level course may be taken

- five courses in one subject may be taken only with the approval of the academic Department concerned; and
- no course may be taken where the student has standing in an equivalent, old curriculum course.
A student with B standing in second year may take an extra course, or one or two extra halfcourses, in third year. The standing obtained will be recorded on the student's transcript, but will not count in determining standing in the year.
third year general science: Students who enter third year General Science in 1969-70 will continue in the old program but changes in requirements will give them more freedom in course selection. Students will select five courses to include:
- Not more than two courses from those offered in the Divisions of Humanities and Social Science ${ }^{(1)}$ (A or B level) provided that prerequisites and co-requisites are met and that an equivalent course has not already been completed.
- Not less than three courses from those offered in the Division of Science(1) (A or B level), provided that pre-requisites and corequisites are met and that an equivalent course has not already been completed. At least one course in this group must be chosen from the following list:

BIO B1 | Cell Physiology and |
| :--- |
| Biochemistry | Biochemistry

BIO B2 Microbiology
BIO B5 Genetics
BIO B6 Plant Physiology ${ }^{(2)}$
BIO B11 Animal Populations and Evolution
BIO B12 Plant Ecology CHM B3 Physical Chemistry
CHM C1 Inorganic Chemistry II
MAT B3 Statistics ${ }^{(3)}$
MAT B5 Geometry
MAT B6 Numerical Analysis ${ }^{(3)}$ and Computing
MAT B7 Applied Mathematics
PHY B11 Quantum Physics
PHY B12 Thermal Physics
(1) In the context of these requirements only, non-laboratory courses in Psychology are assigned to the
Division of Social Science.
(2) Not open to students with credit for BOT 211.
(3) May not be offered in 1969-70 standing in the general courses: To obtain standing in the year, the student must obtain standing in at least four of his five courses, with an
average in all courses of at leas 55\%

To complete the year, the student must obtain standing in all of his courses, with an average of at least 55\%

A student who obtains standing in four of his five courses will be passed in his fifth course with "Below the Line" standing if he obtains an average of $60 \%$ in all courses and obtains $40 \%$ in the examination and aggregate marks of the one subject he fails.
If a student obtains standing in only four of his five courses, and does not qualify for below the line standing in the course he failed, he is said to be "conditioned"' in one course.
The "condition" may be removed: (1) by passing a supplemental examination in the course so that the new passing examination mark, combined with the old term mark, aggregate to over $50 \%$; or (2) by enrolling in and gaining standing in any other third year subject.

A third year student who fails to obtain standing at the annual examinations may rewrite all his examinations in August of the same year.

A student who withdraws after 15th February will be regarded as having failed his year.

EXAMINATIONS AND STANDING
Standing in a course (or half course) The following scale of marks is recommended for use in all courses and half-courses in all years:

| MARK | GRADE |
| :--- | :--- |
| $80 \%$ and above | A |
| $70-79 \%$ | B |
| $60-69 \%$ | C |
| $50-59 \%$ | D |
| below $50 \%$ | Fail |

In the case of half-courses, standing must normally be obtained in each half-course attempted. Marks in two half-courses may not be averaged to produce standing in a whole course-equivalent, except where the academic Department(s) concerned specify that this will be permitted for particular and stated combinations of two half-courses
Any two half-courses (even from different subjects) are equivalent to one full course.

TERM MARKS AND EXAMINATIONS The method of arriving at a final mark for each course or half-course is decided by the academic Department offering the course and will be announced in each case early in the academic term.
In those courses where final examinations are required they are held in a final examination period arranged by the Faculty.

Final examinations will normally be held in all A level courses Where a final examination is held in a course the term work for the course will be not less than one-third nor more than two-thirds of the final grade.
aegrotat consideration
If the ability of a student to complete a course is affected by illness or domestic problems, a petition may be made through the College Registrar for consideration by the Faculty. If there are adequate
grounds for the petition the College Division concerned will determine the status of the work done by the student and the steps, if any, that he must take in order to complete the course.

## THE ANNUAL EXAMINATIONS

The annual examinations are held in April through early May.
Students wishing to write supplementals at the annual examinations must apply to the Secretary. Faculty of Arts and Science, Sidney Smith Hall, University of Toronto by 20th November.

THE AUGUST EXAMINATIONS
The August examinations are open to:

- students in General Arts or

General Science who are conditioned;

- students in the first year of the New Program who qualify to write supplemental examinations:
- students in third year General Arts and General Science who fail to obtain standing in the Annual Examinations; and - students granted special permission to write in August.

Students wishing to write August examinations must apply and pay the supplemental examination fee before 10th July. A charge of one dollar per day to a maximum of $\$ 20$ is made for late application, and applications will not be accepted after 31st July.
examinations at outside centres Arrangements may be made for students to write supplemental examinations in April-May or August at the following centres: Banff, Calgary, Charlottetown, Edmonton,

## Course Descriptions

32 Fredericton, Halifax, Kapuskasing, Kenora, Kingston, Kirkland Lake, London, Montreal, North Bay, Ottawa, Port Arthur, Quebec, Regina, Saskatoon, Sault Ste. Marie,
St. John's (Nfld.), Sudbury, Vancouver, Whitehorse, Windsor Winnipeg, and London, England.
Applications for such arrangements must be made to the Secretary, Faculty of Arts and Science by 20th November and 10th July for the annual and August
examinations respectively. Applications must be accompanied by a special fee of $\$ 10$ for one paper and $\$ 5$ for each additional paper, in addition to the normal supplemental examination fee
If after arrangements have been made, the student decides not to write a paper, he will forfeit his fee unless he notifies the Secretary, Faculty of Arts and Sciences by 1st April or 1st August for the annual and August examinations respectively.


COURSE NUMBERING
Beginning in 1969-70 Scarborough College will have a new course numbering system:-
" A " courses (and language courses numbered " 1 ") are elementary or introductory courses.
" B " courses are intermediate level courses. They may or may not have pre-requisites, which may be either A level courses or other B evel courses.
C" courses are advanced courses, which have at least one $B$ level course as a pre-requisite

For example, the course described below as "PHL B24 THEORIES OF THE MIND" may be identified as follows. It is a course numbered 24 amongst the B-level courses in Philosophy (PHL). This particular course, it will be seen, has a "pre-requisite": a student taking it must have previously taken another philosophy course.
A student may not take any course with a new number which in fact merely duplicates in content a course already taken under an old number. Any student with questions about the equivalance of any new number course to an old number course should consult either the Office of the Registrar or the Chairman or Academic Advisors of Division concerned.

## ANTHROPOLOGY

Anthropology literally means "the study of man", that is, of man in his distinctively human (as opposed to animal) aspects. The subject has four major sub-disciplines. The present curriculum concentrates on two of these: cultural and social

Anthropology; and prehistoric archaeology. The other two (Physical Anthropology and Linguistics) are presented as part of an introductory course, but will be given more attention as staffing permits.
A fundamental premise of Anthropology is the unity of mankind based on recognition of the fact that all varieties of mankind are very similar in physical make-up and basic mental operations, whether they belong to literate or pre-literate cultures. At the same time the diversity of cultures and social forms is among the main concerns of anthropologists. Such general laws as Anthropology has evolved are based on the comparison of specific cultures and societies studied in the field.
ant al introduction to anthropology An introduction to the fields of Anthropology through which the student will obtain the anthropological view of the nature and diversity of man. The first term takes up Physical and Prehistoric Anthropology concentrating on the biological basis and the evidence for human physical evolution, and the archaeological evidence for the origin and growth of culture. Some consideration will be given to anthropological linguistics and to the comparative study of the family, economics, politics and religion in non-industrial societies. Year / Pre-requisite: None Co-requisite: None 1968/9 Equivalent: ANT 100 Instructors: Schroeder, Knight
ant az Political and economic
A general survey of the problems of production, exchange and

34 distribution in Anthropology, and the role of political systems in a largely "developmental" framework. Fall Term / Pre-requisite: None Co-requisite: None 1968/9 Equivalent: ANT 200 Instructor: Shirley.
ant ab kinship and social organization "Kinship is to Anthropology what logic is to Philosophy or the nude is to art; it is the basic discipline of the subject." (Fox) The purpose of the course is to teach something about the species homo sapiens by analysing variations in social structure.
Spring Term / Pre-requisite: None Co-requisite: None
Instructor: Schwimmer.
ant bi human ecology
Fall Term/Pre-requisite: None Corequisite: None Instructor: Knight.

ANT B2 ANTHROPOLOGY OF RELIGION A cross-cultural study of systems of belief and myths concerning spiritual beings and the cosmos; of social actions, rights and obligations arising out of man's postulated dependence on such beings; and of magic, curing, witchcraft and sorcery. Offered in 1969/70 but not in 1970/71.
Spring Term / Pre-requisite: None Co-requisite: None Instructor: Schwimmer.
ant bu the americas: an ANTHROPOLOGICAL PERSPECTIVE A discussion of the origin and development of Native cultures in the New World, with particular emphasis upon changes due to European contact. The course will also focus upon the larger problem of patterns of race in the Americas.

Emphasis will be on Latin America, but not to the exclusion of related aspects in North America. Offered in 1969/70 but not in 1970/71. Fall Term / Pre-requisite: None Co-requisite: None 1968/9 Equivalent: ANT 302 Instructor: Shirley.
ant ba cultures of north america Spring Term / Pre-requisite: None Co-requisite: None
Instructor: Knight.
ANT B5 A SOCIAL ANTHROPOLOGICAL STUDY
After a review of certain cardinal social and cultural background features of the continent, a more intensive study of comparative religion will be made. Hopefully, guest lecturers will help round out the perspective. Offered in 1970/71. Fall Term / Pre-requisite: None Co-requisite: None
1968/9 Equivalent ANT 203
ANT 86 CULTURES OF OCEANIA
In Oceania, many small societies with highly diverse cultures have developed in comparative isolation. The course will survey their kinship structures, economics, political systems, religions and art, drawing from an extensive literature much of which, because of its theoretical importance, is basic for the study of general Anthropology. Offered in 1970/71
Spring Term / Pre-requisite: None Co-requisite: None
ant b7 comparative slavery
An examination of "slavery" as an institution in several areas of the world, including Brazil, Africa, the Caribbean, and the United States An effort will be made to examine the modern consequences of slavery
as well. Offered in 1970/71. Spring Term / Pre-requisite: None Co-requisite: None

ANt BB ANTHROPOLOGY OF DEVELOPMENT An analysis of problems of development and underdevelopment in the world, including the problems connected with "secondary development" in industry and politics. The main focus will be on Latin America though not to the exclusion of other areas, such as Canada. Offered in 1969/70 but not in 1970/71.
Spring Term / Pre-requisite: None Co-requisite: None
Instructor: Shirley.
ANT B9 THEORY AND ANALYSIS IN SOCIAL
AND CULTURAL ANTHROPOLOGY
A seminar discussion course on basic problems and methods in Anthropology. A short survey of past and present anthropological theory will be presented and current schools of thought debated. Offered in 1970/71.
Fall Term / Pre-requisite: None Co-requisite: None

ANT B10 ACTION ANTHROPOLOGY For some years anthropologists have used their knowledge of human societies in attempts to solve "practical" problems. The course will offer an opportunity to do some fieldwork, define some problems existing in the groups investigated and consider possible solutions to these problems. Offered in 1970/71. Fall Term / Pre-requisite: None Co-requisite: None 1968/9 Equivalent: ANT 202
ant b11 man in the pleistocene
The evolution of man in the Pleistocene. A review of the evidence and chronological framework for man's
physical and cultural development during his first two million years.
Offered in 1969/70 but not in
1970/71.
Fall Term / Pre-requisite: None
Co-requisite: None Instructor: Schroeder.
ant bi2 man in the holocene
The evolution of culture in the post-
Pleistocene period. A study of the enormous cultural changes that led to the Neolithic and Urban Revolutions and the beginnings of civilization. Archaeological evidence for these transformations will be revised in both the New and Old Worlds. Offered in 1969/70 but not in 1970/71.
Spring Term / Pre-requisite: None Co-requisite: None Instructor Schroeder.
ANT B13 METHODS AND PRINCIPLES Contion
Consideration of the techniques by which an archaeologist collects and analyses prehistoric data for the reconstruction and study of culture history. Offered in 1970/71 Year / Pre-requisite: None Co-requisite: None
ANT C1 ADVANCED SEMINAR IN
A reading and study course, with a program to be planned each term in consultation between students and instructor.
Year / Pre-requisite: Permission of the instructor Co-requisite: None Instructors: Schwimmer, Shirley.

## ART See 'Fine Art'"

## ASTRONOMY

The subject matter of astronomy encompasses more than 99.9999 per cent of the observable universe; everything, in fact, above the earth's atmosphere, and even some phenomena such as "shooting stars" which occur within the atmosphere. At Scarborough College the student may elect to sample the full extent of astronomical topics in a survey course, A1, or he may delve deeper into astrophysics with the more mathematical and physical course, B1.
ast a1 general astronomy A survey course without prerequisites. The solar system, stars, our galaxy, and the universe at large are described, along with theories of the evolution of each of these systems. The various tools and methods for studying the cosmos are discussed and elementary mathematical and physical concepts which are essential are introduced as needed. Emphasis is given to the historical context in which astronomy has developed, and the student is encouraged to appreciate the interrelations between astronomy and other traditional fields of knowledge.
Year / Pre-requisite: None Co-requisite: None 1968/9 Equivalent: AST 100 Instructor: Kronberg.
AST B1 TOPICS IN ASTROPHYSICS
This course stresses the application of physics and mathematics to astronomical problems in five main areas:

1. Physics of the Solar System; the
determination of the dynamics of the system and of planetary parometers such as mass and chemical composition;
2. Radiative Astrophysics; an introduction to radiative transfer and applications in both optical and radio astronomy;
3. The Structure and Evolution of Stars; a discussion of the equations which govern the lives of stars, and their observational verification;
4. The Structure and Evolution of the Solar System; results of the preceding sections as applied to our nearest star, the sun;
5. The Structure and Evolution of the Universe; an examination of the large-scale constituents of the Universe - galaxies and quasistellar objects - and the temporal behaviour of the system as a whole. Year / Pre-requisites:PHYA1 or 110, MAT A1 or 110, MAT B4 or courses equivalent (required only for 1970-71 and subsequent years).
Co-requisite: None
1968/9 Equivalent: AST 210. Instructor: Roeder

BOTANY See "Biological Science.

## BIOLOGICAL SCIENCE

Biological Science. The study of micro- and macro-organisms of both plant and animal (including man) origin, has developed rapidly as an experimental science since the latter part of the nineteenth century and particularly in the last decade. Modern biology includes the study of both structure and function of all
living organisms, involving the application of Chemistry, Physics and Mathematics. Studies of plant form and function have many practical applications such as the development of new varieties which improve food yield. Many life-saving drugs are derived from plant life. Studies of animal form and function have provided vital information pertaining to man and the study of plant and animal communities is essential in maintaining a balance in nature.

BIO A1 MOLECULAR AND CELLULAR BIOLOGY An introductory lecture and laboratory course dealing with life processes at the molecular and cellular level of organization. Year / Pre-requisite: None Corequisite: None 1968/9 Equivalent: BOT 110, ZOO 110

BIO A2 ORGANISMAL AND POPULATION biology
An introductory lecture and laboratory course dealing with the biology of whole organism and population.
Year / Pre-requisite: None Corequisite: None 1968/9 Equivalent: BOT 110, ZOO 110

## BIO B1 CELL PHYSIOLOGY AND <br> BIOCHEMISTRY

A lecture and laboratory course dealing with the function of cells. It will include aspects of macromolecular synthesis, enzymology, respiratory and photosynthetic metabolism and the control and regulation of cellular metabolism. Year / Pre-requisites: BIO A1 or BOT 110 and ZOO 110* Co-requisite: CHM B5 1968/9 Equivalent: BOT 311, ZOO 310
Instructors: Israelstam and Miyagi
bio в2 microbiology
An introductory lecture and laboratory course on the structure and function of viruses, rickettsias, bacteria and the fungi, and their relationship to man. Year / Pre-requisites:BIO A1 andA2, Or BOT 110 and ZOO 110* Co-requisite: CHM B5 1968/9 Equivalent MBL 310
Instructor: Kingsley
Bio вз phycology
A lecture and laboratory course on the systematics, physiology and ecology of the algae. Spring Term/Pre-requisites: BIO A1 and A2 or BOT 110 and ZOO
110* Co-requisite: CHM B5 1968/9 Equivalent: None Instructor: Sparling
BIO B4 HIStOLOGY AND ULTRASTRUCTURE A lecture and laboratory course on cellular and tissue structure. Year / Pre-requisite: BIO A1 or BOT 110 and ZOO 110* Co-requisite: CHM B5 1968/9 Equivalent: None Instructor: Dengler
bio bs genetics
A lecture and laboratory course in cytogenetics and the genetics of bacteria, fungi, and Drosophila.
Year / Pre-requisite:BIO A1 and A2
or BOT 110 and ZOO 110*
Co-requisite: CHM B5 1968/9
Equivalent: BIO 310
Instructor: Filosa
BIO B6 PLANT PHYSIOLOGY
A lecture and laboratory course, covering aspects of water relations, mineral nutrition, iron and salt uptake, growth and development of plants.
Year / Prerequisites: BIO A1 and A2 or BOT 110 and ZOO 110* and CHM A1 or 110

38 Co-requisites: CHM A1 and B5 1968/9 Equivalent: BOT 211, 311 Instructors: Israelstam, Sparling bio bt development biology (animal) A lecture and laboratory course dealing with the molecular and cellular aspects of development, including the principles of development, and some control mechanism of cellular differentiation. Year / Pre-requisites: BIO A1 or BOT
110 and ZOO 110*
Co-requisite: CHM B5
1968/9 Equivalent: ZOO 210.
bio be invertebrate morphology and PHYSIOLOGY
A comparative study of the morphology and physiology of major phyla with particular reference to the ethology and ecology of the invertebrates.
Year / Pre-requisite: A previous course in Biology, Botany or Zoology
Co-requisite: None 1968/9
Equivalent: ZOO 21
Instructor: Urquhart
BIo B9 VERTEBRATE MORPHOLOGY AND
A comparative study of the morphology and physiology of major phyla with particular reference to ontogeny and evolution.
Year / Pre-requisites: BIO A1 and A2 or BOT 110 and ZOO 110* Co-requisite: CHM B5 1968/9 Equivalent: None
BIO B11 ANIMAL POPULATIONS AND
The interaction of animals with their environments. The distribution of animal species and the dynamics of animal populations.
Year / Pre-requisite: BIO A2
Co-requisite: BIO A1 1968/9
Equivalent: ZOO 311
Instructor: Campbel

BIO B12 PLANT ECOLOGY
A course dealing with the response of plants to the environment, in the broadest sense. Plants are studied at the level of the individual and the species and hypothetical higher vegetation units are discussed.
Considerable attention is paid to theoretical problems and to the use of mathematical models. Some knowledge of statistics is an advantage.
Year / Pre-requisites: BIO A2, CHM A1 Co-requisite: None (Beginning 1970/71, co-requisite will be MAT
B3) 1968/9 Equivalent: BOT 310 Instructor: Yarranton

BIO B13 ORGANIZATION AND PHYLOGENY OF
A lecture and laboratory course on structure, reproduction, and phylogeny of the major groups of living and extinct vascular plants. Special emphasis will be given to the development and structure of cells, tissues, tissue systems and plant parts in the seed plants.
Year / Pre-requisites: BIO A2 or BOT
110 and ZOO 110* Co-requisite: BIO A1 1968/9 Equivalent: BOT 210
Instructor: Dengler

## BIO B14 HUMAN PHYSIOLOGY

A lecture-laboratory course dealing with Mammalian Physiology with special emphasis on the physiology of man. Laboratory course is integrated with the lecture series and allows the students to test the various principles involved.
*In exceptional cases, and with the consent of the instructor, students who have not completed both BOT 110 and $Z O O 110$ may be permitted to use either of these courses to meet the pre-requisite requirements.
(Note: Students emotionally allergic to the sight of blood and living tissue are not advised to enrol in this course.)
Year / Pre-requisite: None Co-requisite: None
1968/9 Equivalent: ZOO 100
Instructor: Urquhart

## CHEMISTRY

At the university level Chemistry is taught under the broad headings of physical, organic, inorganic and analytical chemistry. The topics covered in Physical Chemistry include thermodynamics, statistical mechanics, quantum mechanics and chemical kinetics. Included in Organic Chemistry are stereochemistry and bonding in organic compounds, their synthesis, and the properties and reactions of organic compounds in relation to functional groups. The general chemistry of the elements and problems of structure, bonding and reactions are treated in Inorganic Chemistry, and the course in Analytical Chemistry is designed to create skill in analytical procedures and an understanding of the principles involved.

CHM A1 GENERAL CHEMISTRY
Nuclear Chemistry, atomic and molecular structure, ionic solids; chemical equilibrium in the gas phase and in solution; states of matter and equations of state; first law of thermodynamics, thermochemistry; introduction to kinetic theory of gases and reaction kinetics.
Year / Pre-requisite: Grade 13 Chemistry Co-requisite: MAT A1 1968/9 Equivalent: CHM 110

Instructors: Harris, Riddick,

## A. Walker

## CHM B1 INORGANIC AND ANALYTICAL

Atomic and molecular structure including energy levels, bonding, electronegativity, lattice energies, heats of formation and hydration, etc. Oxidation state diagrams. Chemistry of hydrides, halogens and selected topics in Main Group elements. Lectures designed to support course B2, the Analytical Chemistry Laboratory Year / Pre-requisites: CHM A1 or 110 Co-requisite: None 1968/9 Equivalent: None Instructor: Harris

CHM B2 ANALYTICAL CHEMISTAY LABORATORY
Qualitative analysis; redox equilibria, pH titrations, precipitation titrations, complexometric titrations, ion exchange, chromatography, BeerLambert Law, gravimetric analysis. Year (Half Course) / Pre-requisite: CHM A1 or 110 Co-requisite: CHM B1 1968/9 Equivalent: CHM 214 Laboratory.
CHM B3 PHYSICAL CHEMISTRY ।
The laws of thermodynamics; their experimental origin and application to topics of chemical interest. Introduction to statistical thermodynamics.
Year / Pre-requisites: CHM A1 or 110, PHY A1 or 110 Co-requisite: None 1968/9 Equivalent: CHM 317 Instructor: Riddick
CHM B4 SPECTROSCOPY AND MOLECULAR structure
An introduction to the theories of atomic and molecular structure and spectroscopy, making use of the basic concepts of quantum mechanics. The applications of spec-
troscopy will also be considered; the last quarter of the course will deal with the uses of spectroscopy in organic chemistry. Year / Pre-requisites: CHM A1 or 110, PHY A1 or 110 Co-requisite: CHM B5 1968/9 Equivalent: None

CHM B5 ORGANIC CHEMISTRY
A lecture and laboratory course on the chemistry of aliphatic and aromatic compounds, with emphasis on reaction mechanisms and synthesis. Year / Pre-requisite: None Co-requisite: CHM A1 1968/9 Equivalent: CHM 211 Instructor: Lynch

CHM C1 INORGANIC CHEMISTRY II A study of transition metal chemistry including oxidation state diagrams; atomic structure and energy levels; crystal field theory; molecular orbital theory; a thermochemical and structural survey of:
1 divalent ions
2 trivalent and higher oxidation states
3 Iow oxidation states i.e. carbonyls, nitrosyls, etc
Year / Pre-requisites: CHM B1 and B2, or CHM 214 Co-requisites: CHM B3 and B4 1968/9
Equivalent: CHM 314
Instructor: A. Walker

## CLASSICS

## general classics

These courses are intended to provide, for the student who is not able to read the literature of the GrecoRoman World in the original languages, some appreciation of Greco-Roman civilization through the study of appropriate texts in translation. But, though the courses
are directly concerned with the literature (of the various genres), the philosophy, and the historical and religious thought of the Greeks and Romans, their content is much wider than these specific subjects: in every case the special topics considered will be examined with a view to furthering our understanding of the ancient world and of the relationship between that world and our own. Students will be encouraged to read widely and critically, to contribute to discussions of their reading and to report their findings in literate and original essays.
Courses marked with an asterisk (*) will not be offered in 1969-70, but will be offered in 1970-71

CLA B1 EPIC POETRY (HOMER, VIRGIL AND Four epic poems are read in translation: the lliad and Odyssey of Homer, the Aeneid of Virgil and the Pharsalia of Lucan. In addition, the development of the genre in Greek and Latin Literature is discussed with reference to other epic poems. Emphasis is placed on the poems themselves, but there is also discussion of the historical, social and cultural background.
Fall Term / Pre-requisite: None Co-requisite: None
Instructor: Irwin
-CLA B2 DRAMA (AESCHYLUS, SOPHOCLES, EURIPIDESS. ARISTOPHANES. MENANDER, PLAUTUS, TERENCE,
Year Pre-requis
Co-requisite: None
-CLA B3 LOVE POETRY ISAPPHO AROPERTIUS, CATULLUS, VIRGIL,
Term / Pre-requisite: No
Co-requisite: None
CLA b4 Satire
A study of the development of this
distinctively Roman genre from its origins into the Empire, with reading in translation of the works of Horace, Persius, Juvenal and Petronius. Attention will be given to the literary and social role of the satirist, the influence of the historical and cultural milieu, and the impact of classical satire on such English writers as Dryden, Pope and Donne. Spring Term/Pre-requisite: None Co-requisite: None
Instructor: McDonald

- CLA B5 BIOGRAPHY (NEPOS, SUETONIUS PLUTARCH)
Term / Pre-requisite: None Co-requisite: None

CLA BG ANCIENT HISTORIOGRAPHY
A study of the ancient historians (Herodotus, Thucydides, Livy and Tacitus), their historical thought and their literary techniques; special attention will be given to the intellectual development of the historians in their environment. All texts will be read in translation. Spring Term / Pre-requisite: None Co-requisite: None Instructor: Corbett
-CLA B7 LITERARY CRITICISM (ARISTOTLE,
HORACE, LONGINUS)
Term / Pre-requisite: None Co-requisite: None

## CLA b21 Greek religion

An exploration of the nature and range of Greek religious experience. Among the topics discussed will be - the nature and function of mythology and its relation to religion, the origins of Greek religion, Homer and the Olympian gods, myth and philosophy, mystery religions and popular cults, paganism and Christianity.

Fall Term / Pre-requisite: None Co-requisite: None Instructor: Warden

- cla b24 Roman society

Term / Pre-requisite: None Co-requisite: None

CLA B25 GREEK PHILOSOPHY A discussion and analysis of the thought of the Pre-Socratics, Plato, and Aristotle with consideration of the relevance of their ideas to contemporary philosophy. Same course as Philosophy B11. Fall Term / Pre-requisite: None Co-requisite: None
1968/9 Equivalent: PHL 202 Instructor: Gooch

## ATIN

The following courses are designed to acquaint the student with representative works from various periods and genres of Latin literature, emphasizing through study of the texts, an appreciation of language and style; and, through consideration of their literary and historical background, a basic familiarity with classical Roman civilization. The development of a critical reading knowledge of both prose and verse will be stressed, and language study will be directed to this end.
lat 2 intermediate latin An introduction to Latin literature and the history of the language, through the reading of selected simple texts and in intensive review of accidence and syntax. Emphasis will be placed on helping the student acquire the necessary skills for a basic rapid reading knowledge of Latin; the language laboratory will be used.

Fall Term / Pre-requisite: Grade 13 or equivalent Co-requisite: None Instructor: McDonald
lat b1 catulus and cicero
Representative poetry and prose from the Roman republic, with the reading of selections from the love poems and satiric epigrams of Catullus and a philosophical work of Cicero, de Senectute Spring Term/Pre-requisite: LAT 2. Co-requisite: None Instructor: McDonald
LAT B11 ovid
Selections from Augustan poetry, with reading from Ovid's elegiac and hexameter verse (Amores I, Metamorphoses VIII) and emphasis on the appreciation of poetic language and style.
Spring Term / Pre-requisite: LAT B1 or 100 Co-requisite: None Instructor: Warden
lat b12 Livy
Books 21 and 30 of Livy's history of Rome will be read, with attention given to the events of the Second Punic War as Livy recounts them, the writer's historical aims and methods and his place in Augustan literature. Fall Term / Pre-requisite: LAT B1 or 100 Co-requisite: None Instructor: McDonald
-LAT BI3 VIRGILI: ECLOGUES, 2 bKs.
Term / Pre-requisite: B1 Corequisite: None
-LAT B14 SALLUST: CAT. CONSP
Term / Pre-requisite: B1 Corequisite: None

LAT B21 VIRGIL II
Reading of three books of the Aeneid, as a basis for study of Virgil's epic technique, with em-
phasis on the appreciation of language and style, the writer's contribution to the development of the genre, and the poem's signifi-
cance as a mythological and historical document.
Fall Term / Pre-requisite: LAT B1 or 100 Co-requisite: None Instructor: Grant

- Lat b22 horace: odes, epodes

Term / Pre-requisite: B1
Co-requisite: None
LAT B23 SATIRE
A study of representative pieces from two distinct strains of Roman satire, that of Horace and that of Juvenal, with attention to the role of the satirist in both literary and social terms.
Spring Term / Pre-requisite: LAT B1 or 100 Co-requisite: None Instructor: Collinge

- LAT B24 LUCRETIUS

Term / Pre-requisite: B1 Co-requisite: None
lat b25 plautus and terence
An introduction to the drama of the Roman republic, through the reading of three Latin comedies (including Plautus Rudens and Terence's Phormio), with attention to the nature and development of Roman comedy. Fall Term / Pre-requisite: LAT B1 or 100 Co-requisite: None
Instructor: Grant
lat b26 tacitus
Books 11 and 12 of the Annals of Tacitus will be read, with emphasis on the author's literary and historical aims and methods.
Spring Term / Pre-requisite: LAT B1 or 100 Co-requisite: None
-LAT B27 PROPERTIUS \& TIBULLUS
Term / Pre-requisite: B1
Co-requisite: None

- LAT B28 CICERO: LETTERS

Term / Pre-requisite: B1
Co-requisite: None

## GREEK

An introductory course is offered in the study of classical Greek, on completion of which the student is ready to read Greek literature. Students with varied interests will be attracted to the study of Greek so that they may read in the original works which continue to influence their field, e.g. lovers of literature will find masterpieces of many genres; students of philosophy the beginnings of European philosophy; and historians eye-witness accounts of a fascinating period of history.

## GK 1 INTRODUCTORY GREEK

This course is based on a structural approach to language learning. Selected texts will be read in the second term.
Year / Pre-requisite: None
Co-requisite: None
1968/9 Equivalent: GK 100
Instructor: Irwin

## GK B1 PLATO APOLOGY, LYSIAS IN <br> ERATOSTHENEM

Socrates' speech in his defence will be read first, with accompanying exercises to assist the student in further study of the Greek language; Lysias' speech prosecuting his brother's supposed murderer will be read second.
Fall Term / Pre-requisite: GK 1 or 100, or Grade 13 or equivalent.

## Co-requisite: None

Instructor: Irwin

GK B11 HOMER, ODYSSEY
The wanderings of Odysseus - a reading of 3 books of the Odyssey with discussion of the nature and literary qualities of Homeric epic. Spring Term / Pre-requisite: GK B1 Co-requisite: None 1968/9 Equivalent: GK 200 Instructor: Grant
gk b26 directed reading
An advanced course in the reading of Greek authors, the particular text(s) to be chosen in consultation with the instructor. For those whose interests are particularly literary, drama is recommended, e.g. Euripides Medea and Sophocles Antigone or Aristophanes Clouds; for those with philosophical interests, Plato Protagoras or Symposium; for those with historical interests, Thucydides Bk VII (the Sicilian expedition) or Herodotus (selections); and for pre-theology students, selections from the New Testament, possibly Acts. Fall Term / Pre-requisite or Co-requisite: GK B11 or GK 200 Instructor: Collinge
GK B27 DIRECTED READING (SEE B26 ABOVE) Spring-Term / Pre-requisite or Corequisite: GK B11 or GK 200 Instructor: Warden

GREEK AND ROMAN HISTORY
Greek and Roman History is a study of the history of the Greco-Roman world in antiquity. Like any historical study, its aim is twofold, to determine and convey the essence of Greek and Roman civilization and, by doing so, to further our understanding of man in society, then as now. Since the study is thus humanistic in the widest sense, students of ancient


#### Abstract




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history will concern themselves not only with political history, but with the social and cultural significance of the ancient world as well. Emphasis will throughout be placed on reading of primary source material - what the Greeks and Romans themselves wrote - wherever possible; and, though no knowledge of Greek or Latin is required, those who are able to do so will be encouraged to extend their reading from translations to the original accounts. Thus all students will be expected to pursue independent research, to participate in group discussions of their findings, and to give final written form to their work in careful, original and literate essays.

GRH B1 HISTORY OF GREECE FROM 800 B.C.
TO THE DEATH OF ALEXANDER Political, economic, social and cultural aspects. As far as possible, this course will be studied through the Greek authors (in translation) and attention will be given to the discoveries of archaeology, and its methods. Principal topics include: The World of Homer, past and present; Evolution of Democracy; Sparta, ideal and reality; Athens and Democratic Imperialism; Achievements of Alexander.
Year / Pre-requisite: None
Co-requisite: None
Instructor: Boddington
GRH B2 GREEK AND ROMAN HISTORY FROM THE DEATH OF ALEXANDER TO THE
GRACCHI A study of the emergence and evolution of the Hellenistic Monarchies after the death of Alexander, the development of Rome as a "World Power", and the interaction of Greek and Roman worlds, with its internal effects on both.
Year / Pre-requisite: None

Co-requisite: None Instructor: Derow

GRH B3 ROMAN history from the GRACCHI TO NERO
A study of the Roman Republic as a social and political organization, and as a "World Power". The collapse of the republican system of government and the reconciliation of republican forms with military despotism and increasing bureaucracy. This course will emphasize close study of the primary sources for the period; these sources will be read in translation.

For 1969/70 only, GRH B3 will take in the Later Empire (down to Constantine). The study of the late Republic will be abbreviated accordingly. For this year only, then, B3 will be equivalent to the third year dqurse on the Roman Empire offered under the old curriculum.
Year / Pre-requisite: None Co-requisite: None
Instructor: Corbett
GRH B11 GREEK HISTORY 510 - 404 B.C
The Classical Age, its character and achievements. A closer look at Athens and Democratic Imperialism; at Sparta and other Greek societies, and at the developments in thought and art of this period. The content of the course will to some extent be determined by the interests of the students.
Year / Pre-requisite: None Co-requisite: None Instructor: Boddington
-GRH B12 GREEK HISTORY: HELLENISTIC AGEE SELLCTION OF THEMES AND
PROBLEMS
Year / Pre-requisite: None Co-requisite: None

GRH B13 THE ROMAN REPUBLIC A detailed study, for the more
advanced student, of the origins, development and organization of the Roman Republic with special attention to the primary sources and the problems of interpretation which they present. Certain special topics or periods may be chosen for a closer study; the choice of these areas of concentration will be determined to some extent by the interests of the students.
Year / Pre-requisite: None Co-requisite: None Instructor: Corbett

- GRH B14 ROMAN HISTORY: AT LEAST ONE PERIOD FROM THE EMPIRE
Year / Pre-requisite: None Co-requisite: None


## COMPUTER SCIENCE See "Mathematics".

## EARTH SCIENCE

Earth Science in its broadest sense is the study of the Earth and its constituent parts. It encompasses the fields of geology, geophysics, physical geography, oceanography, meteorology and planetary science. At Scarborough the emphasis is on the natural processes at work today and in the recent past on and beneath the surface of the earth. Earth environments are a central theme in relation to their changing patterns during the Quaternary Era.
In 1969/70 only, credit may not be received for both ESC A1 and ESC B1.
esc al introduction to earth science An introductory survey of the principles of physical geology and physical geography. Included is a brief review of earth materials, the
rock cycle, subsurface and surface processes and an examination of current theories on the origin and development of the lithosphere. Lectures and laboratories. Same course as Geography A2. Year / Pre-requisite: None Co-requisite: None Instructors: Berger, Greenwood
esc bi introduction to geology A general survey course covering principles, applications and current concepts. Special attention will be directed toward Minerology, Historical Geology, Applied Geology and the Geology of the Moon. Lectures and laboratories. Year / Pre-requisite: GGR 100. Students will find an understanding of chemistry, mathematics and physics advantageous Co-requisite: None 1968/9 Equivalent: GLG 100 Instructor:/Berger

## ECONOMICS

The student of Economics learns to understand the working of the economic system-the complicated network in which individuals, business and governments interact to produce, distribute, and consume goods and services. The objective study of this system helps the student to understand economic causes and effects. Equipped with this understanding, economists then try to deal with concrete realistic problems which face national governments - unemployment, inflation, economic expansion and stagnation, the control of monopolies, labour legislation, and many other such subjects.

ECO A1 INTRODUCTION TO ECONOMICS
This course is concerned fundamentally with the question why we are as well off as we are, and why some of us are much better off and others much worse off than the average. The approach is that expressed by J. M. Keynes: "Economics does not furnish a body of settled conclusions immediately applicable to policy, it is a method, a technique of thinking, which helps its possessor to draw correct conclusions".
Year / Pre-requisite: None Co-requisite: None 1968/69 Equivalent: ECO 100
ECO B1 PRICE THEORY
This course is designed as an intermediate level of exposition of price theory. The primary emphasis is on developing the techniques of static partial equilibrium analysis. However, applications of the models to policy problems are considered. The analysis is also extended to problems of general equilibrium and optimal welfare.
Year / Pre-requisite: ECO A1 or 100 suggested Co-requisite: None 1968/9 Equivalent: ECO 201

ECO B2 NATIONAL InCOME AND THE
This course is designed as an intermediate level exposition of national income analysis. The procedure involves a progressive expansion of the basic Keynesian equilibrium model. Among the topics considered are the problems of full employment, inflation, cyclical fluctuation, growth and external balance. The emphasis throughout is on developing the analytical apparatus.
Year / Pre-requisite: ECO A1 or 100, or ECO B1 or 201; or alternatively

ECO B1 as co-requisite 1968/9 Equivalent: ECO 301

## ECO B3 NORTH AMERICAN ECONOMIC HISTORY

This course is intended as a survey of important themes in the economic history of Canada and the United States. A comparative approach is employed to develop such themes as the role of natural resource staple industries, the evolution of financial institutions, problems of industrialization and urbanization, and the relationship of the state to economic change in the two countries.
Year / Pre-requisite: ECO A1 or 100 suggested Co-requisite: None 1968/9 Equivalent: ECO 300

## ECO B4 EUROPEAN ECONOMIC HISTORY

This course employs a historical approach to consider the pattern of economic development in Great Britain and a number of continental countries. The course focuses on the period since 1750. The main topics discussed include the role of capital accumulation, the importance of the state, and the impact of international trade on the countries concerned.
Year / Pre-requisite: ECO A1 or 100 suggested Co-requisite: None 1968/9 Equivalent: ECO 200

ECO B5 QUANTITATIVE METHODS IN ECONOMICS
The purpose of this course is to introduce the student to elementary statistics and their application to economic problems. In addition other quantitative techniques used in economics will be discussed. Special reference will be made to sources and uses of quantitative economic data in Canada Year / Pre-requisite: ECO A1 or 100;
orMATA1or 100/110 Co-requisite: None 1968/9 Equivalent: None

## ECO B6 LITERATURE OF POLITICAL ECONOMY

A study of the classical literature of political economy; especially of selections from the works of Adam Smith, Malthus, Ricardo, J. S. Mill, Marx, Jevons, Marshall and Keynes.
The study of the literature is intended to improve the students' understanding of contemporary economic literature and of the contemporary economic world. It should also improve his ability to assess the wisdom of contemporary economic policies. Problems of method and conflicts of value are discussed.
Year / Pre-requisite: ECO A1 or 100; or ECO B1 or 201 Co-requisite: None 1968/9 Equivalent: None

ECO B7 PUBLIC FINANCE
This course deals with the public sector of the Canadian economy and in particular with how resources are obtained from the public through taxation and allocated through government spending. Consideration will also be given to how the pattern of government taxing and spending can be used to regulate economic activity.
TermCourse / Pre-requisite: ECO A1 or 100 suggested Co-requisite: ECO B2 1968/9 Equivalent: None
eCO bo industrial organization
Term Course / Pre-requisite: ECO
B1 or 201 Co-requisite: ECO B2
1968/9 Equivalent: None
ECO B9 ECONOMIC DEVELOPMENT
Term Course / Pre-requisite: ECO
B1 or 201 Co-requisite: ECO B2
1968/9 Equivalent: None

ENGLISH LITERATURE
ENG A1 FORMS OF TWENTIETH CENTURY
Five novels of five of the following authors: Conrad; Lawrence; Woolf; Hemingway; Fitzgerald; Waugh;
Faulkner; a more recent novel to be selected. Five plays of five of the following dramatists: Shaw; O'Casey; $\quad L$ O'Neil; Williams; Fry; Osborne; Pinter; Albee; Eliot; Beckett; Brecht; a play to be selected. Three of the following poets: Yeats; Frost; Eliot; Williams; Auden; Dylan Thomas; Stevens; a younger poet. Additional works at the discretion of the instructor.
Year / Pre-requisite: None, $\qquad$ 5 Co-requisite: None
Eng az Shakespeare the
Special study of Romeo and Juliet, A Midsummer Night's Dream, Richard II, Henry IV Farts I and II, Twelfth Night, Measure for Measure, Hamlet, Antony and Cleopatra, The Tempest. Other plays may be added at the discretion of the instructor. Year / Pre-requisite: None Co-requisite: None
eng a3 american literature
Three of the following poets: Edward Taylor, Poe, Whitman, Dickinson, Frost, Stevens, Pound, Eliot, Hart Crane, Robert Lowell.

Four of the following novels: a novel of Cooper; Hawthorne, The Scarlet Letter; Melville, Moby Dick; Twain, Adventures of Huckleberry Finn; James, The Portrait of a Lady; a novel of Howells; a novel of Steven Crane; a novel of Dreiser; a novel of Faulkner; Ellison, Invisible Man. Three of the following: Bradford, Of Plymouth Plantation; Crevecoeur, Letters from an American Farmer;

48 Franklin, Autobiography; Irving, A History of New York; Dana, Two Years before the Mast; Parkman, The Oregon Trail; Thoreau, Walden; Twain, Life on the Mississippi; Adams, The Education of Henry Adams; Cummings, The Enormous Room; Wolfe, Look Homeward, Angel; Baldwin, Notes of a Native Son.

Additional works at the discretion of the instructor
Year / Pre-requisite: None Co-requisite: None

ENG A7 MAJOR BRITISH WRITERS
Selections from at least ten of the following: Chaucer, Spenser, Shakespeare's non-dramatic poetry, Donne, Milton, Pope, Johnson, Wordsworth or Keats, Browning or Tennyson, Hopkins, Yeats or T. S. Eliot.

Text: The Norton Anthology of English Literature, one volume ed. (Alternative or additional texts at the discretion of the instructor.) Three plays, at least one by Shakespeare; Swift, Gulliver's Travels or Johnson, Lives oi Pope and Milton and Preface to Shakespeare; one novel, novella, or group of short stories by each of: Bunyan or Fielding; Dickens or George Eliot; and Joyce or James. Year / Pre-requisite: None Co-requisite: None

ENG B4 RESTORATION AND EIGHTEENTH CENTURY LITERATURE
The literature of the Restoration and Eighteenth Century with special reference to the works of Dryden, Defoe, Swift, Pope, Fielding, Richardson and Johnson. Year / Pre-requisite: None Co-requisite: None

ENG B5 ROMANTIC LITERATURE A reading of the poetry of Wordsworth, Coleridge, Shelley, and Keats in the context of their Eighteenth Century inheritance and their influence on the Victorians. Some attention will be given to contemporary criticism, and to European literature of the Period. Year / Pre-requisite: None Co-requisite: None
eng be victorian literature
Selections from Tennyson, Browning, Arnold, Clough, D. G. Rossetti, Morris, Swinburne, Hardy, Hopkins. Readings in Arnold, Carlyle, Mill, Ruskin, Pater, and others. Six novels from the works of Dickens, Disraeli, George Eliot, Trollope, Butler and one other. Plays by Robertson, Wilde, Shaw, and others at the discretion of the instructor. Year / Pre-requisite: None Co-requisite: None

ENG B8 ENGLISH LITERATURE, FORMS AND APPROACHES
A selection of works chosen so as to explore forms and approaches. Readings in criticism to be assigned. Year / Pre-requisite: None Co-requisite: None

ENG B9 ENGLISH LITERATURE 1580-1660
1 At least three of Sidney: selected poems; Spenser: selections from the Faerie Queene and further selections at the discretion of the instructor; Shakespeare: selected sonnets and further selections at the discretion of the instructor; Donne: selected poems.
II At least two of Jonson: selected poems; Herrick: selected poems; Herbert: selected poems; Marvell: selected poems; Vaughan: selected poems; a selection of
seventeenth century poets; a selection of Milton's minor poems; Paradise Lost: selections. III At least three of Sidney: The Defense of Poesie (as in the Anthology); Bacon: selected prose; Donne: selected prose; Milton: Areopagitica and of Education (as in the Anthology); a selection of seventeenth century prose. IV Three plays by Elizabethan and Jacobean playwrights excluding Shakespeare; three plays by Shakespeare.
$\checkmark$ Further reading in English and in influential continental writers of the European Renaissance at the discretion of the instructor. Year / Pre-requisite: None Co-requisite: None
eng b11 VARIETIES OF DRAMA Beckett, Waiting for Godot; Congreve, The Way of the World; Eliot, Murder in the Cathedral; Everyman; Johnson, The Alchemist; Shakespeare, As You Like It or Merchant of Venice; Shakespeare, King Lear; Shaw, Heartbreak House or St. Joan; Synge, The Playboy of the Western World; Thomas, Under Milk Wood; at least nine more plays, chosen so as to extend the range of types of drama, and to illuminate by comparison the listed texts.
Year / Pre-requisite: None Co-requisite: None
eng b14 VArieties of prose fiction A comparative study of forms, modes, themes, and styles of prose fiction from various periods. Year / Pre-requisite: None Co-requisite: None

ENG B15 ENGLISH POETRY, A STUDY OF various forms
A comparative study of forms,
modes, themes, and styles of poetry有
Year / Pre-requisite: None Co-requisite: None eng b34 modern literature Poetry of Eliot, Yeats, and at least two of the following: Pound, Frost, Williams, Stevens, Auden, Graves. Two more poets at the instructor's discretion. Three novels and at least two shorter works from the following authors: Fitzgerald, Hemingway, Faulkner, Conrad, Lawrence, Joyce, Forster. Two additional works at the instructor's discretion. Four plays from the following authors: O'Neill, Albee, Miller, Osborne, Pinter, Beckett, Brecht. Two more plays at the instructor's discretion. Year / Pre-requisite: None Co-requisite: None

## FINE ART

In this subject library sources, slides, reproductions and photographs provide material for two approaches to study and interpretation:

Historically, as the visual and most concrete evidence of civilization by which the student will become acquainted with the main intellectual, religious, political and social trends as they have found expression in art. He will thus be introduced to a cultural history of a broad and international character.
ii Aesthetically, as monuments of the creative mind. The interpretation of composition, of "design" in its wider sense, will make him aware of the values of beauty and give basis for intelligent aesthetic judgement broad introduction to the history of ancient and medieval art and architecture through study of selected monuments which illustrate the style, themes, and techniques of their periods and the function of art in each. Students will be required to complete assigned background readings as well as be conversant with the material in H. W. Janson's History of Art to equip them for participation in class discussions. Term Course / Pre-requisite: None Co-requisite: None
Instructor: Schaefer
FA A2 INTRODUCTION TO ART (ARCHITECTURE, SCULPTURE,
PAINTING) FROM 1400 TO THE PAINTING)
PRESENT
The course will deal with problems of methodology, iconography, terminology; it will also include informal discussions between students and instructor. A survey is not part of the program but reading will be required in order to provide factual background.
Term Course / Pre-cequisite: None Co-requisite: None Instructors: Johnson, Vastokas.

FA B1 ROMANESQUE ART
After a selective study of those art forms of the early medieval period which are preparatory to Romanesque art, an intensive consideration of the esthetic principles, characteristics of style, dominant themes, and technical inmovations of Western European art of the period 1050 to 1200 will be undertaken to show its experimental vitality and role as a communicator of its culture to our times.
Term Course / Pre-requisite: FA A1
or 100 (1968-69)
Co-requisite: None Instructor: Schaefer
fa b2 Gothic Art
The art and architecture of the years 1150 to 1420 in Western Europe will be studied to show its genesis, development, and diffusion. The increased importance of wider patronage, artistic personalities, and workshops will be put into relief against more general considerations of style and regional variation. Selected readings and class reports in history, literature, and philosophy will clarify the position of Gothic art as a mirror of medieval culture. Term Course / Pre-requisite: FA A1 or 100 (1968-69)
Co-requisite: None
Instructor: Schaefer
fa b3 RENAISSANCE ART
The course will provide a background of information on the whole problem of the Renaissance (paintings, sculpture and architecture in Europe ca. 1400-1600), but special emphasis will be put on the architecture of the 15th century in Florence and Central Italy, from Brunelleschi to Bramante. Students will be responsible for a knowledge of art during the whole period whether this has been treated entirely or not - taking as a basis H. W. Janson's History of Art. Term Course / Pre-requisite: FA A2, or FA 100 (1967-68) or
200 (1968-69)
Co-requisite: None
Instructor: Scavizzi
fa b4 baroque art
The whole problem of the Baroque will be treated; the main emphasis, though, will be put on painting in Flanders, Holland and Spain ca.

1600-1700, particularly on Rubens, Rembrandt, Vermeer and Velasquez Responsibilities of the students as B3 above.
Term Course / Pre-requisite FA A2, or FA 100 (1967-68) or
200 (1968-69)
Co-requisite: None
Instructor: Johnson.
fa b5 19th CEntury art
Art History B5 aims to introduce and define the major stylistic events of the 19th century in Europe. Special emphasis will be given to the period 1886-1905 with a view to establishing the character of the arts against the social and cultural background of Europe.
Term Course / Pre-requisite: FA A1 or A2 or FA 100 or 200 or a B-level course Co-requisite: None Instructor: Vastokas

FA B6 20th CENTURY ART Art History B6 continues the introductory survey of modern art begun in B5 and will deal with painting, architecture, and sculpture from 1905 to the present.
Term Course / Pre-requisite: FA A1 or A2 or FA 100 or 200 or a B-level course Co-requisite: None Instructor: Vastokas.

On petition the A1 or A2 prerequisite may be replaced by oral examination covering the same material, as contained in H. W. Janson's History of Art and Key Monuments of the History of Art.

## FRENCH

Our basic course, French A1, assuming satisfactory completion of Grade XIII French, is devoted to consolidating the previous experience of students in reading, writing
and speaking French, while acquainting them with the range of advanced studies open to them in university and providing some significant experience in various areas such as language, literature and civilization. This basic course will include intensive language practice and much of this will involve carefully planned work in the language laboratory.
Supplementary to the basic course, two literature courses including French and French-Canadian literature of the twentieth century will be offered. In these courses the student will be introduced to the intensive study of vital works of literature and made aware of various critica approaches.

More advanced courses in French will normally embrace a choice of up to four courses from the following groups: 1 the main trends of French and French-Canadian literature:
2 various genres - poetry, theatre, the novel, criticism, etc - in various periods; 3 advanced language and 4 language practice courses
From such a wealth of courses students of widely differing tastes and needs may select satisfying programmes. All courses, unless otherwise specified, are conducted in French.

FR A1 PREPARATION FOR UNIVERSITY
FRENCH STUDIES
A basic course for students intending to devote a significant part of their undergraduate studies to French language and/or literature. The major part of it is devoted to practical language work (phonetics, language laboratory, oral classes, written composition). A part of the course is also intended to present


52 a general introduction to French civilization.
Year / Pre-requisite: Grade 13 French Co-requisite: None 1968/9 Equivalent: FR 100

FR A2 STUDIES IN MODERN FRENCH litature
A detailed study of selected works from the fields of French Poetry, novels and dramas of the 19th and 20th centuries. The course is intended as a practical introduction to techniques of literary criticism and analysis as applied to French literary works.
Year / Pre-requisite: Grade 13 French Co-requisite FR A1

## FR A4 MAN AND SOCIETY IN FRENCH FICTION

A detailed study of selected works from the fields of French and French-Canadian fiction concerned with the theme of man and society. The course will include a practical introduction to the techniques of literary criticism and analysis as applied to prose fiction written in French.
Year / Pre-requisite: Grade 13 French Co-requisite: FR A1
fr aloo readings in french literature For students who do not intend to devote a large part of their studies to French language and/or literature. The course will concentrate each year on one particular mode, such as satire or tragedy or comedy. Lectures and tutorials will ordinarily be in English, but they may be given in French if the members of a class so decide.
Year / Pre-requisite: A reading knowledge of French tested by an entrance examination for students without Grade 13 French.
fr b1 LANGUAGE PRACTICE
A continuation of first year language work, including grammar, composition, oral vocabulary, pattern drills and language laboratory work. Year / Pre-requisite: FR A1 or 100 Co-requisite: None
fr b2 THE CLASSICAL CURRENT IN FRENCH LITERATURE
This course is primarily concerned with the 17th century and the great writers of that period; however, works from other authors and other periods which are in some way related may also be studied Year / Pre-requisite: FR A1 or 100 Co-requisite: None
FR B3 INTRODUCTION TO FRENCH
A study of linguistic theories from the beginning of the 20th century as applied to modern French.
Year / Pre-requisite: FR A1 or 100 Co-requisite: None

FR B4 THE PHILOSOPHICAL CURRENT IN is course is primarily intended to study the works of the 18 th century "'philosophes", such as Montesquieu, Voltaire, Diderot and Rousseau; however, works from other authors and other periods which are in some way related may also be studied.
Year / Pre-requisite: FR A1 or 100 Co-requisite: None
FR B5 GENERAL HISTORY OF THE FRENCH A historical survey of the evolution of French as one of the Romance languages: its formation, development and present state.
Year / Pre-requisite: FR A1 or 100 Co-requisite: None

FR B6 THE ROMANTIC CURRENT IN FRENCH This course is primarily intended to
study some of the works (poetry, prose, drama) of the main writers associated with French Romanticism in the 19th century; however, works from other authors and other periods which are in some way related may also be studied.
Year / Pre-requisite: FR A1 or 100 Co-requisite: None
fR B8 FRENCH DRAMA FROM 1800
This course is primarily intended to provide a means of understanding various dramatic styles and techniques through a study of representative French plays of the 19th and 20th centuries.
Year / Pre-requisite: FR A1 or 100 Co-requisite: None

FR B10 FRENCH PROSE FICTION FROM 1800 TO 1900
A study of important prose works (novels and short stories) representative of the main currents of 19th century French literature: (Romanticism, Realism, Naturalism, etc.). Year / Pre-requisite: FR A1 or 100 Co-requisite: None

FR B12 FRENCH PROSE FICTION FROM 1900 A study of important prose works (novels and short stories) representative of the main trends of 20th century French literature. Year / Pre-requisite: FR A1 or 100 Co-requisite: None

FR B16 THE LITERATURE OF FRENCH-CANADA
A study of representative works of French-Canadian literature from a historical and esthetic point of view with main emphasis on the contemporary period.
Year / Pre-requisite: FR A1 or 100 Co-requisite: None

GEOGRAPHY
Geography is concerned with the spatial distribution of physical and human phenomena and with the association of things that distinguish one area of the earth from another
The face of the earth is made up of many different kinds of features each of which is the momentary result of a continuing process. Many kinds of physical and cultural processes operate and the result of the interaction of processes is that the face of the earth is marked off into distinctive areas. Geography seeks to interpret the significance of the similarities and differences among areas in terms of causes and consequences.

## GGR A1 INTRODUCTION TO HUMAN

An introduction to the main ideas and fields of interest in human geography, including the distribution and growth of world population, major cultural and economic contrasts, forms of settlement and urbanization. This course involves lecture, practical and seminar work Year / Pre-requisite: None Corequisite: None 1968/9 Equivalent: None
Instructor: Cave
GGR A2 INTRODUCTORY PHYSICAL GEOGRAPHY
An introductory survey of the principles of physical geography and physical geology. Included is a brief review of earth materials, the rock cycles, sub-surface and surface processes and an examination of current theories on the origin and development of the lithosphere. Same course as Earth Science A1. Year / Pre-requisite: None but a

54 background in Mathematics and Physics would be an advantage. Co-requisite: None 1968/9 Equivalent: GGR 100 Instructors: Berger, Greenwood.
gar b1 geography of resources Problems of resource use with particular reference to their environmental setting.
Year / Pre-requisite: GGR A1 or A2 or GGR 100 Co-requisite: None 1968/9 Equivalent: GGR 200 Instructor: Tayyeb.

GGR B2 GEOGRAPHIC METHODS
The aim of the course is to introduce students to a few of the elementary analytical techniques which are at present used in geography. Emphasis is placed on the accumulation and presentation of geographic information and the subsequent analysis of quantitative data The course includes a study of aerial photogrammetric techniques, field and lab techniques, data presentation and basic statistical methods. Year / Pre-requisite: GGR A1 or A2 or GGR 100 Co-requisite: None 1968/9 Equivalent: GGR 201 Instructor: Greenwood.
gGr bz climatology
A more detailed examination of climatic processes than in GGR A2, including climatic change, microclimates, soils and vegetation. Year / Pre-requisite: GGR A2 or 100 Co-requisite: None
1968/9 Equivalent: None
Instructor: Francis.
gGr b4 geography of canada and u.s.a.
A historical approach to the geo-
graphy of North America; lectures, seminars and practical work.
Year / Pre-requisite: GGR A1 or 100

Co-requisite: None
1968/9 Equivalent GGR 300
GGR b5 URban Geography
An introductory course focusing on the characteristics and major problems of North American cities under the following headinys: urbanization and processes of urban growth; systems of cities; urban form and design; spatial structure of urban land uses and activities; distinctive socio-economic areas within the city; circulation, transportation and migration; city planning and renewal.
Year / Pre-requisites: GGR A1 or GGR 100 and GGR B2 or GGR 201 Co-requisite: None 1968/9 Equivalent: GGR 301 Instructor: Cave
gar be economic geography
A study of the location of, and interaction between, various types of industrial and agricultural activities. Year / Pre-requisites: GGR A1 or GGR 100 and GGR B2 or GGR 201 Co-requisite: None 1968/9 Equivalent: None Instructor: Bunce

GGR B8 GEOGRAPHY OF UNDERDEVELOPED
An examination of the definition, nature, performance and problems of underdeveloped areas Year / Pre-requisite: GGR A1 or 100 Co-requisite: None 1968/9 Equivalent: None
Instructors: Tayyeb and Cave.

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GEOLOGY
See "Earth Science",
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## GERMAN

Modern literature in Germany developed late. The first great writers appeared towards the end of the eighteenth century. But for Lessing, Goethe, and Heine to Brecht and Thomas Mann they have remained vigorous and individualistic, and concerned with the widest range of human problems, philosophical and psychological, moral and religious, social and economic.
The courses in German offer a thorough study of the language and of the more important authors. Language study includes phonetics and laboratory work, oral expression, translation, and essay-writing.
ger al introduction to german Close readings of poetry, drama and prose of the 20th century. Intensive language work, focusing on oral and written composition. Year / Pre-requisite: Grade 13 or Equivalent Co-requisite: None GERB1 INTRODUCTION TO EPOCHS BEFORE
The course is to provide the student with a background in German literary history, so that he will be better equipped to understand the development from the middle of the 18th century onward. Special emphasis will be given to Reformation, Humanism and Baroque. Fall Term / Pre-requisite: Grade 13 or Equivalent Co-requisite: None

Ger bz 20th CEntury prose
A study of essays, novels, short stories, and novellas by such authors as Mann, Musil, Kafka, Brecht, Böll, Grass, et al.
Fall Term / Pre-requisite: GER B1 or 100 Co-requisite: None

GER B3 20th CENTURY DRAMA AND POETRY The course will deal with plays by Wedekind, representative playwrights of Expressionism, Brecht, Frisch, Dürrenmatt, younger German writers such as Hochhut, Kipphardt, Weiss. The poetry will be selected from the works of Rilke, George, Hofmannsthal; the Expressionists Heym, Trakl, Benn, Lasker-Schüler; Kaschnitz, Celan, Enzensberger, etal. Spring Term / Pre-requisite: GER B1 or 100 Co-requisite: None

GER B4 ADVANCED CONVERSATION AND COMPOSITION
A continuation of the language work done in A1 on a higher level.
Term Course (Fall and Spring) / Prerequisite: GER A1 or 100 Corequisite: None

GER B11 CLASSICISM
The classical works of Schiller and Goethe will be at the core of this course. At the same time, literary critical and cultural critical writings of such men as Herder and Winckelmann will be discussed along with essays and the exchange of letters by Schiller and Goethe Year / Pre-requisite: GER B1 or 100 Co-requisite: None

GER B15 19th CENTURY PROSE
The course will be concerned with the novels and novellas by writers such as Storm, Droste-Hülshoff, E. T. A. Hoffmann, Keller, Fontane, Hauptmann, et al.
Fall Term / Pre-requisite: GER B1 or 100 Co-requisite: None

GER B16 19th CENTURY DRAMA AND POETRY The development of drama from Büchner to Hauptmann. The discussion of plays by these authors and by Grabbe, Grillparzer, and

56 Hebbel will show different tendencies evolving at this time, often summarily referred to as dramatic theatre versus epic theatre. The poems will be selected from the works of the late Romantics, some of the above-mentioned authors, Heine, Mörike, et al. Spring Term / Pre-requisite: GER B1 or 100 Co-requisite: None

GER CI SEMINARS ON SPECIAL TOPICS The form and the topic for each of these seminars will be decided by discussion between the professor and the student(s) involved. The topics, generally speaking, will be more limited than any of the other courses, the work more intensive. Term Course (Fall and Spring) / Prerequisite: GER B1 or 100 Corequisite: None

## GREEK

See "Classics"

GREEK AND ROMAN HISTORY
See "Classics".

## HISTORY

History seeks to describe the activities of men and societies in the past, and in the process to provide a fuller understanding of the present. The writing and criticizing of essays is also stressed. History, which is based on written records, is a form of literature and loses much value if its findings are not communicated in clear and effective writing. At the same time, the sources of these findings must be carefully assessed and precisely reported, for the historian must use the most accurate data available in trying to analyze
men and societies in the past. Thus History is both a "humanistic study" and a "social science" since it has many of the characteristics and concerns of both these general fields.

HIS A1 EUROPEAN CIVILIZATION SINCE THE
Major themes in European History from the Middle Ages to the present day. Two lectures and one tutorial per week.
Year / Pre-requisite: None Co-requisite: None Instructors: Marrus, Pearl.

HIS B1-2 BRITISH HISTORY SINCE 1485
An examination of the forces, political, social, economic and religious, which transformed an aristocratic society into a world-wide industrial power and the reason for its subsequent decline. Two lectures and one tutorial per week.
Year / Pre-requisite: None Co-requisite: None
Instructor: Kenyon.
HIS B3-4 HISTORY OF THE UNITED STATES General Survey of American political, economic and diplomatic history from the Revolution to the present day. Two lectures and one tutorial weekly.
Year / Pre-requisite: None Co-requisite: None Instructors: Sheps, Dick.
his bs-6 Canadian history - a survey Exploration and settlement; the foundations of New France; the British Conquest and colonial growth; Confederation and the consolidation of the Dominion; World War I and the development of dominion status; the Great Depression and regional political reactions; external relations and
involvement in World War II. Two lectures and one tutorial weekly. Year / Pre-requisite: None Co-requisite: None Instructor: Moir.
HIS B13-14 EUROPEAN URBAN HISTORY This seminar will examine the city as a historical institution from the rise of the Medieval town to the city of the industrial age. Emphasis will be upon social and intellectual factors, though other areas such as urban planning and architecture will be discussed.
Year / Pre-requisite: HIS A1 or 100 Co-requisite: None Instructor: Pearl.

HIS B15-16 REVOLUTION AND COUNTER-
REVOLUTION IN MODERN EUROP Selected topics in the history of European revolutions since 1789, examining the political, economic, social and intellectual ingredients of revolutions during this period. Seminar discussion will focus upon contemporary source materials, the historiography of European revolutions, as well as an evaluation of the contributions of modern sociological theory.
Year / Pre-requisite: HIS A1 or 100 Co-requisite: None Instructor: Marrus.

HIS B19-20 BRITISH EMPIRE-
COMMONWEALTH FROM 1850
An examination of imperialism, nationalism and racial problems in the contemporary world. Particular attention will be paid to developments in Asia and Africa. Year / Pre-requisite: HIS B1-2 or 200 Co-requisite: None Instructor: Kenyon.

HIS B33-34 AMERICAN SOCIAL AND INTELLECTUAL HISTORY TO 1852
Radical Experiment and Reaction in
the New Republic: Topics in American Social and Intellectual History to 1852. The ideas and institutions which helped to shape American society and politics, with emphasis on religious and social radicalism, the problem of the Negro and slavery, regional, especially Southern culture, and political ideology. Concentration in the early 19th century, but themes of continuing influence from the pre-Revolutionary and Revolutionary period will also be examined.
Year / Pre-requisite: B3-4 or 202/302 Co-requisite: None Instructor: Sheps.

HIS B35-36 SEMINAR: THE AMERICAN
RESPONSE TO INDUSTRIA
RESPONSE TO INDUSTRIALISM
The political, social and intellectua response to industrialism from the Gilded Age through the New Deal. While relevant aspects of political history will be studied, seminar discussions will mainly focus on contemporary writings and the historiography of the labour and radical movements.
Year / Pre-requisite: HIS B3-4 or 202/302 Co-requisite: None Instructor: Dick.

## HIS B41 OLD HURONIA

The political, social, religious and economic life of the Huron Indians at the time of European contact; the Christian missions to the Hurons; the effects of European contact on Indian life; the collapse of the Jesuit missions and the dispersal of the Hurons. Examination of these and related aspects of Huron history will be based on extensive use of primary source material. Capacity 15 students.
Term Course / Pre-requisite: None
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58 Co-requisite: None Instructor: Moir.
his b42 Church-state relations in CANADA
A study based on primary source material of the connection of church and state in such areas as land endowment, education, legal establishment and social issues. Capacity - 15 students.

Term Course / Pre-requisite: None Co-requisite: None
Instructor: Moir

## ITALIAN

ita 1 introductory italian
Main elements of the Italian grammar. Stress will also be given to oral practice in the classroom and in the laboratory. Short contemporary texts will be studied and translated in the second term.
Year / Pre-requisite: None Co-requisite: None
1968/9 Equivalent: ITA 100 Instructor: Sanguinetti and others.
ita 2 Intermediate italian
Intensive review of the grammar. Drills, exercises and compositions to develop greater skill in writing and speaking the language. Fall Term / Pre-requisite: ITA 1 or 100 or Grade 13 Co-requisite: None 1968/9 Equivalent: ITA 200 grammar only
ita a Conversation, intermediate The aim is to enable the student to acquire a good working knowledge of the spoken language. Special attention will be given to idioms and special constructions.
Spring Term / Pre-requisite: ITA1 or 100 or Grade 13
Co-requisite: None
Instructor: Costa.

ITA 4 ADVANCED COMPOSITION AND STYLISTICS
Selected texts will be studied and translated. The aim is to develop the student's ability to read and write proficiently, and to approach literary and learned texts with confidence. Spring Term / Pre-requisite: ITA 2 or 200 Co-requisite: None Instructor: Costa.

ITA B11 TWENTIETH CENTURY LIterature
AND CULTURE From Decadentism to Existentialism. The problems, issues, ideas and personalities from the unification of Italy to the present, as reflected in the novel, drama and poetry. Year / Pre-requisite: ITA 2 or 200 Co-requisite: None Instructor: Costa.
ita b21 introduction to italian literature
A survey of Italian literature, from the Middle Ages to the present. Emphasis will be given to authors and periods of major importance. Year / Pre-requisite: ITA 2 or 200 Co-requisite: None Instructor: Franceschetti.
ita b31 dante and medieval culture Introduction to Medieval Italian literature; its origin and development, leading up to Dante and the masterpiece of the Middle Ages. The Divine Comedy; a brief survey of his minor works; their significance in terms of the life and culture of the time.
Year / Pre-requisite: ITA 2 or 200
Co-requisite: None
Instructor: Franceschetti.
ita b32 PEtRARCH AND boccaccio
The Canzoniere and the Decameron.
The rise of Humanistic thought and culture, the beginnings of the Renaissance.

Spring Term / Pre-requisite: ITA 2 or 200 Co-requisite: None Instructor: Costa.

## LATIN

See "Classics"

## LITERATURE

LIT B1
A survey of recent fiction and drama in English, and in French and German in Translation. Course taught by the French, German and English Departments.
Year / Pre-requisite: None Corequisite: None

## MATHEMATICS

(Including Mathematics, Applied Mathematics, Computer Science and Statistics)
Mathematics may be considered as the art or science of making deductions from given statements. Both the deductions themselves, and the methods used to make them, come within the scope of mathematics, while the original statements, called hypotheses, largely do not. The immense power and utility of mathematics have arisen because the results deduced apply to any collection of objects or ideas satisfying the hypotheses.

As the abstract and structural aspects of mathematics have been developed and as the quantitative features of the newer sciences have come to be recognized, new needs for mathematics and new kinds of mathematics to meet the needs have appeared with increasing frequency.

## mat a1 calculus

A continuation of Grade 13 Calculus,
including limits, differentiation integration, partial derivatives, multiple integrals, differential equations, and applications of Calculus to the natural and social sciences.
Year / Pre-requisite: Grade 13 Mathematics A or MAT A3 Co-requisite: None 1968/9 Equivalent: MAT 100/110
mat az nature of mathematics A historical and philosophical look at mathematics, its methodology and its relationship to reality, including: logic, set theory, abstraction, models, axiomatic systems, the infinite. The course will include lectures, discussions, written essays, and presentations of investigations by students. Enrolment by permission of instructor.
Not offered in 1969-70.
Year / Pre-requisite: None
Co-requisite: None
1968/9 Equivalent: None.
mat a3 linear algebra
Basic definitions prepared by discussion of $\mathrm{E}^{3}$ and complex numbers, theorems about dimensions and basis, determinants, linear equations, innerproduct spaces, orthonormal bases.
Fall Term / Pre-requisite: Grade 12 Mathematics Co-requisite: None 1968/9 Equivalent: None
mat a4 probability
An introduction to the mathematical theory of probability with applications to statistics:
Spring Term / Pre-requisite: Grade 12 Mathematics
Co-requisite: None
MAT AS INTRODUCTION TO COMPUTERS AND PROGRAMMING
Algorithms and flow charts. An introduction to stored-programme

60 computers and programming Elementary applications in data processing, non-numerical problems, and simulations.
Fall Term / Pre-requisite: Grade 12 Mathematics Co-requisite: None 1968/9 Equivalent: None
MAT B1 ANALYSIS I
Calculus with rigour in classical style. Real number systems, convergence of sequences, limits of functions, continuity, differentiability, Riemann integral, curve length. Power series.
Fall Term / Pre-requisite: MAT A1 or 100/110 Co-requisite: None 1968/69 Equivalent: MAT 200/210

MAT B2 ALGEBRA I
Integers, rational, real and complex numbers. Introduction to groups, rings and fields. Polynominals. Continuation of vector spaces, matrices with polynominal elements. Year / Pre-requisites or Corequisites: MAT A1 or 100/110 or MAT A3; or Grade 13 Mathematics B 1968/69 Equivalent: MAT 211/300

MAT BA VECTOR CALCULUS
Infinite series. Differential and integral calculus of functions of a vector variable, with emphasis on vectors in $E^{2}$ and $E^{3}$, line and surface integrals. This course tends to careful formulation of results without emphasis on proofs.
Fall Term / Pre-requisite: MAT A1 or 100/110 Co-requisite: MAT A3 strongly recommended but not required 1968/9 Equivalent: None

MAT BS GEOMETRY
A modern approach to Euclidean geometry, with emphasis on the axiomatic method, modification of the axioms to yield non-Euclidean forms of geometry and comparison
of synthetic and metric geometries Year / Pre-requisite: MAT B2 or 211/300 Co-requisite: None 1968/9 Equivalent: MAT 201
mat b7 ApPLIED MATHEMATICS
A study of ordinary and partial differential equations with applications to problems in physics. Year / Pre-requisite: MAT B1 or 200/210 or MAT B4 Co-requisite: None 1968/9 Equivalent: APM 310

MAT BB ANALYSIS II
Point-set topology.
Spring Term / Pre-requisite: MAT B1 or 200/210 Co-requisite: None 1968/9 Equivalent: None

## MICROBIOLOGY

See "Biological Science"

## NATURAL SCIENCE

## NSC AZ HUMAN PHYSIOLOGY

Not offered in 1969-70. Students interested in a course in human physiology should take Biological Science B14.

## PHILOSOPHY

Philosophy consists in a critical analysis of the fundamental ideas and concepts at the roots of such major areas of human concern as science, society, religion, morality, and art. Its aim is to scrutinize the basic notions in these areas, to clarify the principles on which they are founded, to evaluate such fundamental beliefs for their soundness, and to explore their implications for a comprehensive understanding of the world in which we live. Philosophy originates in the desire to know, and its value consists in the systematic develop-
ment of a questioning attitude and critical awareness.
Note: Numbers in brackets refer to course numbers in
Philosophy in the Calendar of the
Faculty of Arts and Science.
PHL A1 (100) INTRODUCTION TO PHILOSOPHY
A systematic inquiry into some main philosophical problems: the
techniques of correct reasoning and questions concerning knowledge and belief, mind, freedom, morality, and God.
Year / Pre-requisite: None Corequisite: None 1968/9
Equivalent: PHL 102
Instructors: Aarons, Gooch, Graham, Hartman, Miller, Mosher

PHL B1 (200) Introduction to ethics
An investigation of the functions of morals with reference to problems of modern society; a study of the basic criteria of moral judgments.
Term Course (Fall and Spring) Pre-requisite: None Co-requisite: None 1968/9 Equivalent: PHL 100 Instructors: Miller, Sobel
PHL B2 (201) CONTEMPORARY ETHICS An examination of such twentiethcentury developments in ethical theory as intuitionism, emotivism, instrumentalism; trends in
metaethical theory.
Fall Term / Pre-requisite: PHL A1 or 102; or PHL B1 or 100
Co-requisite: None
Instructor: Miller
PHL B3 TOPICS IN THE HISTORY OF ETHICS A concentrated study of the writings of selected moral philosophers from the time of Plato through the nineteenth century.
Spring Term / Pre-requisite: None Co-requisite: None
Instructor: Gooch

PHL B5 (202) POLITICAL PHILOSOPHY
A critical survey of some political concepts: society, the state, natural rights, laws and social justice; the moral basis of political obligation some theories of revolution
Fall Term / Pre-requisite: PHL A1 or 102; or PHL B1 or 100
Co-requisite: None
Instructor: Graham
PHL B11 (209, 210, 305, 306) GREEK
A discussion and analysis of the thought of the Pre-Socratics, Plato, and Aristotle with consideration of the relevance of their ideas to contemporary philosophy Fall Term / Pre-requisite: None Co-requisite: None 1968/9 Equivalent: PHL 202 Instructor: Gooch

PHL B12 MEDIEVAL PHILOSOPHY
A study of philosophic thought in the Middle Ages through the works of major thinkers: Augustine, Anselm, Aquinas, Ockham, and others Spring Term / Pre-requisite: None Co-requisite: None
1968/9 Equivalent: None Instructor: Mosher

A systematic study of the central problems in the works of the seventeenth-century philosophers Descartes, Spinoza, and Leibniz. Fall Term / Pre-requisite: None Co-requisite: None
1968/9 Equivalent: PHL 302 Instructor: Mosher

PHL B14 (212, 308) BRITISH EMPIRICISM A systematic study of the central problems in the works of the eighteenth-century philosophers Locke, Berkeley, and Hume.
Spring Term / Pre-requisite: None

62 Co-requisite: None
1968/9 Equivalent: PHL 302 Instructor: Sobel

## PHL B15 (310) KANT

A detailed study of Kant's theory of knowledge and metaphysics. Spring Term / Pre-requisite: PHL B13 or PHL B14 Co-requisite: None 1968/9 Equivalent: PHL 302 Instructor: Mosher

PHL B16 (313) NINETEENTH-CENTURY
PHILOSOPHY The emergence of German idealism and various critical reactions to it; philosophies of irrationalism, positivism, and empiricism; the philosophical implications of scientific developments. Fall Term / Pre-requisite: PHL A1 or 102; or any one of PHL B11 through PHL B15; or PHL 202 Co-requisite: None
1968/9 Equivalent: PHL 302 Instructor: Hartman

PHL B17 (314) TWENTIETH-CENTURY
PHLOSOPHY
An examination of some main philosophical currents in contemporary thought through a discussion of influential writings of
representatives of such major movements as pragmatism, logical positivism, and ordinary language analysis.
Term Course (Fall and Spring) Pre-requisites: PHL A1 or 102; or any one of PHL B11 through PHL B16; or PHL 202 Co-requisite: None Instructors: Hartman, Graham

## PHL B18 (213) EXISTENTIALISM AND PHENOMENOLOGY

Some recent philosophies of existence and experience in the light of certain dominant movements in the nineteenth century; an examina-
tion of the writings of Kierkegaard, Husserl, Jaspers, Heidegger, Sartre, and others.
Term Course (Fall and Spring) /
Pre-requisite: PHL A1 or 102 Co-requisite: None Instructor: Aarons

PHL B21 (203) PHILOSOPHY OF RELIGION
A systematic approach to the phenomena of religion and its associated problems: the nature and existence of God, religious knowledge, the meaning of religious symbolism and language, the bearing of religion on human conduct.
Term Course (Fall and Spring)
Pre-requisite: None
Co-requisite: None Instructor: Gooch

PHL B23 (204) AESTHETICS
An exploration of some central concepts which arise in discussing and evaluating the arts: some principal theories about the nature and functions of art, the creative process, the aesthetic experience, the evaluation of works of art.
Spring Term / Pre-requisite: None Co-requisite: None
Instructor: Hartman
PHL B24 THEORIES OF MIND
The bearing of recent advances in philosophy and psychology on the problem of the nature of mind and its relation to the body, other minds, and machines.
Spring Term / Pre-requisite: One previous course in Philosophy Co-requisite: None Instructor: Graham

PHL B26 (205) PHILOSOPHY OF LITERATURE Ethical and metaphysical ideas as embodied in literary works of art; a
philosophical investigation of some problems in the description, interpretation, and evaluation of literature.
Fall Term / Pre-requisite: None Co-requisite: None
Instructor: Aarons
PHL B31 (206) SYMbolic Logic The chief techniques of modern formal logic used in philosophy, mathematics, and the sciences: Truth-function theory, prepositional calculus, predicate calculus, quantification theory, elementary theory of sets; introduction to more advanced topics such as the foundations of arithmetic.
Fall Term / Pre-requisite: None Co-requisite: None Instructors: Mosher, Sobel

PHL B32 (208) INDUCTIVELOGIC AND
A study of the methods of the natural and social Sciences with particular attention to the nature of inductive inference, theories of probability, and problems of concept formation in science.
Fall Term / Pre-requisite: PHL A1 or 102; or two courses in Science Co-requisite: None

PHL B33 (334, 311, 312) EPISTEMOLOGY A discussion of some of the major problems in the theory of knowledge, such as perception, the nature of truth, belief and certainty. Spring Term / Pre-requisite: PHL A1 or 102 Co-requisite: None instructor: Miller

PHL B34 (303) METAPHYSICS
A discussion of some of the major problems in the theory of reality: substance, existence, persons, change, space and time, with reference to both classical and
contemporary viewpoints.
Spring Term / Pre-requisite: PHL A1 or 102; or any one of PHL B11 through PHL B16; or PHL 202
Co-requisite: None
Instructor: Aarons
pHL B35 philosophy of language
An examination of some central themes in contemporary discussion of the nature of language and its relevance to philosophical problems; contemporary theories of the nature of meaning and the function of language.
Spring Term / Pre-requisite: One previous course in Philosophy Co-requisite: None instructor: Graham

PHL C31 (211) pHiLOSOPHICAL USES OF
LOGIC
A study of the application of the techniques of modern symbolic logic to selected problems in Philosophy. Spring Term / Pre-requisite: B31 Co-requisite: None Instructor: Sobel

## PHYSICS

Physics has as its objective the analysis and understanding of matter from the microscopic scale of the atomic nucleus to the scale of the universe itself. In this study some factual knowledge is necessary, but equally important is an ability to analyze physical situations so as to determine what ingredients are essential and what can be neglected. This is reflected in studies at the university level, where the emphasis is on such analysis, in order that the student develop an ability to use his factual knowledge.
The student of Physics
must also study Mathematics
because Mathematics is a necessary tool in the study of Physics, but Physics is not just applied Mathematics. Because modern science is based on experiment, laboratory work is essential in connection with Physics courses.

For 1969/70 only, students who have completed their second year under the old regulations and have taken Physics 210, along with its pre- and co-requisite, may take any of the following new courses in their third-year programmes without further pre- or co-requisite: Physics B3, Physics B11, and Physics B12.

PHY A1 MECHANICS, WAVES AND THERMAL
The motion of a single particle is dealt with extensively from the points of view of both the classical theory of Newton and the special theory of relativity of Einstein; then the treatment is extended to systems of several particles, such as molecules. Following this, systems involving large numbers of particles are studied using elementary kinetic theory and statistical mechanics. Quantum ideas are introduced. In conclusion, the microscopic world is examined in terms of the particle nature of matter. (Lectures and laboratory).
Year / Pre-requisite: Grade 13
Math A*, Grade 13 Physics
Co-requisite: MATA1 1968/69 Equivalent: PHY 110
*Students lacking Grade 13 Math A may take PHY A1 if they take MAT A3 concurrently.

PHY B1 ELECTRICITY AND MAGNETISM The fundamentals of electricity and magnetism and of electromagnetic radiation are introduced and
developed. (Lectures and tutorial). Year / Pre-requisite: PHY A1 or 110 Co-requisite: MAT A3, MAT B4 1968/9 Equivalent: PHY 210 Instructor: O'Donnell
phy bz electronics
The physica! principles of electronic devices such as vacuum tubes and semiconductor diodes and transistors are studied. Circuits incorporating these devices are described, and methods of circuit analysis are developed. (Lectures and laboratory).
Year / Pre-requisite: PHY A1 or 110 Co-requisite: PHY B1 1968/9 Equivalent: None Instructor: Perz
PHY B11 QUANTUM PHYSICS
The wave-particle quality is developed by treating such topics as de Broglie waves, the Compton effect, Rutherford scattering, and the uncertainty principle. The Schroedinger equation is introduced and applied to potential well and harmonic oscillator problems, and to one-electron atoms. Quantum numbers, degeneracy, angular momentum, magnetic moment, and spin are discussed. Multi-electron atoms are treated, with references to the periodic table. X-rays and such phenomena as pair production and the photoelectric effect are studied in detail. A treatment of nuclear properties follows, including such topics as size, mass and stability, models of the nucleus, (e.g., shell model), alpha, Beta, and gamma decay, and nuclear forces and reactions. (Lectures and laboratory). Year / Pre-requisite: PHY B1 or 210 Co-requisite: MAT B1 1968/9 Equivalent: PHY 310, 311 Instructor: Soots

PHY B12 THERMAL PHYSICS
The basic concepts of thermodynamics are introduced and applied to bulk properties of macroscopic physical systems. This phenomenological approach is followed by the development of the kinetic theory of gases and of the statistical mechanics of classical and quantum systems. The resulting statistical definitions of thermodynamic quantities are related to the phenomenological ones. (Lectures and tutorial).
Year / Pre-requisite: PHY B1 or 210 Co-requisite: MAT B1
1968/9 Equivalent: None Instructor: M. B. Walker

## POLITICAL SCIENCE

Political Science studies the process and structure of government both concretely and at various levels of generalization. It describes and analyzes various kinds of government, ranging from liberaldemocratic systems to totalitarian systems, and from national to municipal; also the relations between different levels of government, and the relations between national states. It deals with the way governments exercise their power.
pol al government of canada
A study of the political process in Canada, including Canadian political culture, the formation of public opinion, political behaviour, political parties, the constitution, federalism, French Canada, federalprovincial financial relations, and the structure and functioning of political institutions, such as the cabinet,
parliament, the judiciary, and the public service.
Year / Pre-requisite: None
Co-requisite: None
1968/9 Equivalent: POL 100
Instructor: Blair
POL B1 CONTEMPORARY FRENCH CANADA
Open to students of all years and all courses. A seminar course given in French once a week on Political, Economic, Social and Cultural realities of today's French Canada.
The case-study approach used relies heavily on French language video and sound tapes and newspaper clippings, as well as guest lecturers, mainly from Quebec. Students must have a high standard of fluency in oral French to enrol and will be somewhat handicapped if they lack elementary training in Political Science, Economics, or Sociology.

The class makes a brief study tour of Quebec City in February. Admission at instructor's discretion following a short French test in mid-September.
Year / Pre-requisite: Competence in French Language
Co-requisite: None
1968/9 Equivalent: POL 204, 304 Instructor: Spicer

POL B2 WORKSHOP IN CANADIAN GOVERNMENT
Year / Pre-requisite: POL A1 or 100
Co-requisite: None
1968/9 Equivalent: None
Instructor: Blair
pol bz modern political thought
Year / Pre-requisite: None
Co-requisite: None
1968/9 Equivalent: None Instructor: Will

POL B5 PUBLIC ADMINISTRATION Year / Pre-requisite: None Co-requisite: None 1968/9 Equivalent: None Instructor: Hawkins

POL B9 POLITICS AND GOVERNMENT OF
UNDERDEVELOPED COUNTRIES Pre-requisite: None Co-requisite: None 1968/9 Equivalent: None

POL B10 INTERNATIONAL RELATIONS
This is an introduction to the political relations among states. The course places special emphasis on the issues of war and peace, other international political behaviour and the international institutions created to deal with problems relating to the conduct of international relations. Year / Pre-requisite: None Co-requisite: None 1968/9 Equivalent: POL 302

## PSYCHOLOGY

Psychology is that branch of science which seeks to understand the behaviour of organisms, both human and infrahuman, normal and abnormal. Psychology accepts the individual organism rather than the collective or group as the unit of analysis. It attempts to determine how organisms perceive, how they develop and change over the course of their life histories, how they choose among alternative courses of action and, particularly with humans, how they relate to their fellows and to social institutions. The courses in this discipline are designed to further an awareness of the fundamental principles of psychology, its research findings, and the means by which psychological knowledge is acquired. The emphasis, thus, is upon scientific
inquiry, rather than upon the development of service skills.
pSY A1 Introduction to psychology A consideration of the basic principles and methods of contemporary psychology, emphasizing their contributions to an understanding of how organisms, both human and infrahuman, perceive their environments, how their behaviour is modified by experience, and how their activities are instigated. sustained, and directed. Year / Pre-requisite: None Corequisite: None 1968/9 Equivalent: PSY 100 or PSY 210

PSY B1 SOCIAL PSYCHOLOGY
The behaviour of man as influenced by others in his environment. Includes: person perception, attitude change, conformity, status, leadership, prejudice, co-operation and competition.
Year / Pre-requisite: PSY A1 or 100 or 210 Co-requisite: None 1968/9 Equivalent: PSY 204 Instructor: Ross

PSY B2 DEVELOPMENTAL PSYCHOLOGY Study of the changing psychological processes of the growing individual. Emphasis is given to experimental findings concerning the development of the emotional and cognitive aspects of social behaviour in childhood.
Year / Pre-requisite: PSY A1 or 100 or 210 Co-requisite: None 1968/9 Equivalent: PSY 300
pSy b3 personality
Individuals display characteristic and enduring ways of relating to their natural and social environments. How these personality traits are measured, how they develop
(whether through genetic inheritance or through learning), how they interrelate, and how they differ among individuals are among the topics of concern
Year / Pre-requisite: PSY A1 or 100 or 210 Co-requisite: None 1968/9 Equivalent: PSY 306

## pSy b4 LEARNING

An intensive study of the principles underlying the environmental control of behaviour. Laboratory exercises focus on the acquisition and extinction of responses, discrimination, generalization, and the effects of schedules of reinforcement. Prior or concurrent enrolment in PSY B7 is recommended. Not open to students with credit for PSY 210.
Year / Pre-requisite: PSY A1 or 100 Co-requisite: None
1968/9 Equivalent: PSY 201 Instructor: Biederman
pSy bs sensation and perception
A detailed exploration of man's information-processing capabilities, including consideration of both physiological and psychological mechanisms underlying the detection, quantification, interpretation, storage, and utilization of sensory information. Basic principles of information-processing are illustrated in laboratory exercises. Prior or concurrent enrolment in PSY B7 is recommended. Not open to students with credit for PSY 210. Year / Pre-requisite: PSY A1 or 100 Co-requisite: None
1968/9 Equivalent: PSY 303
Instructor: Smith
PSY B6 PHYSIOLOGICAL PSYChOLOGY
The structure and function of the nervous system is related to the study of behaviour.

Year / Pre-requisite: PSY A1 or 100
or 210 Co-requisite: None 1968/9 Equivalent: PSY 305
pSY b7 Statistical methods
An examination of statistical decision procedures with particular attention to their role in the description of research data, in the drawing of reasonable inferences from experimental findings, and in the prediction of future outcomes. Fall Term / Pre-requisite: None Co-requisite: None
Instructor: Forrin
PSY B8 EXPERIMENTAL DESIGN
The application of analysis of variance techniques to research data.
Spring Term / Pre-requisite: PSY B7 Co-requisite: None Instructor: Forrin

## RUSSIAN

RUS 1 ELEmENTARY RUSSIAN
Introduction to the structure of contemporary Russian with language laboratory practice. Graded readings in the original.
Year / Pre-requisite: None Co-
requisite: None 1968/9
Equivalent: SLA 100
Instructor: Zelonka
rus 2 Intermediate russian
Continued study of Russian with language laboratory practice, oral practice, composition and study of literary texts.
Year / Pre-requisite: RUS 1 or SLA
100 Co-requisite: None 1968/9
Equivalent: SLA 200
rus 3 Advanced russian
Intensive and extensive study of literary texts. Oral practice and composition.

68 Year / Pre-requisite: RUS 2 or SLA 200 Co-requisite: None Instructor: Ponomareff

RUS A1 INTRODUCTION TO RUSSIAN LITERATURE AND CULTURE
Russian literature in its cultural context. Readings in translation from all periods of Russian literature.
Year / Pre-requisite or Co-requisite: RUS 1 or SLA 100
Instructor: Zelonka
RUS B11 NINETEENTH CENTURY
RUSSIAN LITERATURE dy o
Study of the major literary currents in nineteenth century Russia through extensive readings in translation of the works of Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy and others. Specialists will be required to do a certain amount of reading in the original. Year / Pre-requisite: None Co-requisite: None Instructor: Zelonka
rus bi2 Study of the russian drama Survey of the Russian theatre from its origins to the present. Readings in translation of the works of Griboedov, Pushkin, Gogol, Ostrovsky, Chekhov, Mayakovsky, and others. Specialists will be required to do a certain amount of reading in the original.
Year / Pre-requisite: None Corequisite: None Instructor: Ponomareff

RUS B21 THE RUSSIAN NOVEL OF THE TWENTIETH CENTURY
Study of modernism and the literature of Soviet Russia. Readings in translation of the works of major writers including Gorky, Sholokhov, Babel, Leonov, Fedin, Pasternak, and Solzhenitsyn. Specialists
will be required to do a certain amount of reading in the original. Year / Pre-requisite: None Corequisite: None Instructor: Ponomareff

During 1969/70 third-year students will be allowed to enrol in any of the B courses. Enrolment, however, will be regulated by the instructor of each specific course.

SLAVIC STUDIES
See "Russian".

## SOCIOLOGY

Sociology is a discipline concerned with the scientific study of human society. Through its examination of the workings of society, of how social groups come into being and change, it offers an understanding of some of the most pressing problems of the world in which we live: crime, juvenile delinquency, family disorganization, social class conflict, industrial unrest, etc.
soc a1 introduction to sociology An introduction to the basic concepts, principles and methods of Sociology as a discipline for the study of society. Major topics studied include the nature of social groups, social processes, culture, social structure, socialization, deviant behaviour, population, community, stratification, social institutions and social change.
Year / Pre-requisite: None Co-requisite: None 1968/9 Equivalent: SOC 100 Instructor: Gerson
soc az contemporary society An examination of contemporary society through the use of basic
principles and methods of sociology. This course will emphasize a particular and crucial substantive aspect of contemporary society. Year / Pre-requisite: None Co-requisite: None 1968/9 Equivalent: SOC 200 Instructor: Lee
SOC B1 METHODS OF SOCIAL RESEARCH Course aims include both a formal study of methodology and a practical introduction to social research design, data collection and analysis. Laboratory sessions include exercises in computer programming, elementary statistics, graphics and library research. Students design and execute suitable projects as an important part of their term work. Year / Pre-requisite: None Co-requisite: None
1968/9 Equivalent: SOC 201
SOC B3 HISTORY OF SOCIAL THEORY
This course is concerned with the development of sociology and with the works of particular sociologists whose concepts not only have historical interest but also have relevance to contemporary sociology.
Year / Pre-requisite: None
Co-requisite: None
1968/9 Equivalent: SOC 301
soc b4 POLItical sociology
Political Sociology is the study of the interrelationship between society and polity, between social structures and political institutions. The first part of the course deals with the literature of political sociology from Marx to the present; the latter part of the course with the Canadian polity in particular.
Year / Pre-requisite: None
Co-requisite: None

1968/9 Equivalent: SOC 302 Instructor: Hanna
soc b10 Social stratification Description and analysis of the nature of social stratification, with emphasis on the basis of stratification, different theoretical views concerning stratification, the structure and function of stratification systems, social classes and associated behaviour, social mobility and class conflict. Year / Pre-requisite: None Co-requisite: None 1968/9 Equivalent: SOC 300
soc b12 sociology of the family The sociological study of the family in contemporary western society, with special emphasis on its historical development, social forces which have influenced it, interrelationship with other institutional forms, the family as a small group, the family life cycle, family disorganization and family change. Year / Pre-requisite: None
Co-requisite: None
1968/9 Equivalent: SOC 204 Instructor: James
soc b13 CANADIAN SOCIETY
A sociological analysis of Canadian society, with emphasis on its changing structure.
Year / Pre-requisite: None Corequisite: None 1968/9 Equivalent: SOC 303 (St. George)
Instructor: Hanna
SOC B16 SOCIAL ORGANIZATION
Analysis of the structural forms and processes of social systems,
including the microscopic analysis of small sub-groups and subcultures as well as the macroscopic

70 study of national and international systems. Specific topics include bureaucracy and bureaucratic processes; racial and ethnic minorities, with special reference to their internal communities and intergroup processes, status hierarchies, life styles and life changes; mechanisms of social control; modernization and its consequences for social organization.

Offered in 1970/71.
Not offered in 1969/70.
Year / Pre-requisite: None
Co-requisite: None 1968/9 Equivalent: SOC 306

## soc b18 deviant behaviour

A sociological analysis of various forms of deviant behaviour, including an examination of causal theories, social definitions, maintenance, control and social consequence. Year / Pre-requisite: None
Co-requisite: None
Instructor: Gerson
SOC B2O SOCIAL PERCEPTION: RACE AND SOCIAL PERCEPTION
ETHNIC RELATIONS
A consideration of the relevance of theories of social perception to the analysis of relations between racial and ethnic groups.
Year / Pre-requisite: None
Co-requisite: None
Instructor: James

## SPANISH

## SPA 1 INTRODUCTORY SPANISH

A course in basic grammar and syntax. Instruction in spoken and written Spanish and rapid comprehension of idiomatic speech with the aid of a co-ordinated laboratory programme.
Year / Pre-requisite: None Co-requisite: None

1968/9 Equivalent: SPA 100 Instructor: Bartha
spa 2 intermediate spanish
Review of Spanish grammar and syntax. Elementary composition. Fall Term / Pre-requisite: SPA 1 or 100; or Grade 13; or equivalent Co-requisite: None 1968/9 Equivalent: SPA 200 Instructor: Maillard

## SPA 3 PRE-LITERARY EXAMINATION OF

Preparation in the basic elements of Spanish stylistics and in the rapid reading and comprehension of texts of various periods and subject matter.
Spring Term / Pre-requisite: SPA 2 or 200 Co-requisite: None 1968/9 Equivalent: SPA 200 Instructor: Barta
SPA 4 PHONETICS
Principles of articulatory phonetics; fundamentals of Spanish speech sounds; intensive practice in their pronunciation and transcription. Lecture and laboratory.
Fall Term / Pre-requisite: SPA 1 or 100 Co-requisite: None Instructor: Skyrme
SPA 5 INTERMEDIATE CONVERSATION This course is designed to give the student intensive practice in spoken language through controlled situational oral practice, discussion groups and the passive comprehension of the speech of major Spanish linguistic areas. Lecture and laboratory.
Fall Term / Pre-requisite: SPA 1 or 100 Co-requisite: None

## SPA 7 INTERMEDIATE SYNTAX AND COMPOSITON COMPOSITION

This course is designed to give the student intensive practice in
effective writing and a reasonable degree of naturalness in the use of the idiomatic language.
Spring Term / Pre-requisite: SPA 2 or 200 Co-requisite: None
spa bi1 survey of spanish literature
Reading, analysis and discussion of Peninsular Spanish literature from the Twelfth to Twentieth centuries with the object of acquainting the student with the major literary movements of each period, the authors and their works.
Year / Pre-requisite: SPA 3 or 200 Co-requisite: None
1968/9 Equivalent: SPA 300 Instructor: Barta

SPA B12 HISTORY OF THE SPANISH LANGUAGE
The Pre-Roman, Roman, Visigothic and Moorish civilizations in Spain; the growth of the Spanish language from Latin; the evolution of its phonology, morphology, syntax and vocabulary.
Spring Term / Pre-requisite: SPA 4 or permission of instructor
Co-requisite: None Instructor: Skyrme

SPA B13 Modern hispanic literature Nineteenth century Spanish literature: survey of Romanticism and Realism concentrating on specific representative texts. Fall Term / Pre-requisite: SPA 1 or 100 Co-requisite: SPA 2 or permission of instructor Instructor: Skyrme
SPA B14 MODERN HISPANIC LIterature Modernism and the Generation of '98, their origin and contribution to modern Spanish literature; detailed study of representative texts. Spring Term / Pre-requisite: SPA 2 or 200 Co-requisite: SPA 3 or per-
mission of instructor
spa b22 medieval literature
Reading, analysis and discussion of major texts in prose and poetry from the Twelfth to the Fifteenth centuries Fall or Spring Term / Pre-requisite: SPA 3 or 200
Co-requisite SPA B11
Instructor: Barta
spa b24 Golden age drama
Study of the development of the Spanish drama from the Middle Ages to the Golden Age; reading, analysis and discussion of major texts.
Fall Term / Pre-requisite: SPA 3 or 200 Co-requisite: SPA B11
1968/9 Equivalent: SPA 301 Instructor: León

SPA B25 GOLDEN AGE PROSE
Study of the development of Spanish prose writing; reading, analysis and discussion of the major types of prose writing in the Golden Age. Spring Term / Pre-requisite: SPA 3 or 200 Co-requisite: SPA B11 1968/9 Equivalent: SPA 301 Instructor: León

SPA B28 SPANISH AMERICAN LITERATURE Survey of the main currents of Spanish American literature from colonial times to the present, with attention paid to the fundamental economic, social and cultural factors of the periods under consideration. Reading, analysis and discussion of selected texts.
Fall Term / Pre-requisite: SPA 3 or
200 Co-requisite: SPA B11
1968/9 Equivalent: SPA 302
Instructor: León
SPA b29 Spanish american literature Short story. History of the Spanish

72 cuento; examination of short stories by Spanish and European authors in order to attempt a definition of the short story; reading, analysis and discussion of the various forms of the Spanish American short story. Spring Term / Pre-requisite: SPA 3 or 200 Co-requisite: SPA B11

1968/9 Equivalent: SPA 302 Instructor: León

## STATISTICS <br> See "Mathematics"

ZOOLOGY
See "Biological Science"

Upwards of 30 "credit courses" will be offered at the College in the evenings during the fall and winter session of 1969-70. The list of these courses will be announced shortly and details may be obtained from the Registrar of the College (284-3127).

These courses count as "credits" towards the B.A. degree of the University of Toronto in the Division of Extension. The College offers a special welcome to Extension students.


## ADMISSION

## A student seeking to enter

 Scarborough College must apply for admission to the University of Toronto, and should indicate "Scarborough College" as his first choice on his application form 1)e Minimum Requirements for Ad mission of Ontario Students: Students who have completed ore will be completing the Ontario Gradee XIII must offer the following minimume requirements:e(a) Grade XII Program: Applicants must have successfully completed at least six Grade XII subjects (not including Physical Education). These subjects must include at least five from the following list, and at least one from each of the four groups in the following list:
(i)e English.e
(ii) French, German, Greek,e Italian, Latin, Russian,e Spanish.e
(iii)e History (Parts 1 and 2),e Geography (Parts 1 and 2 ).e
(iv)eMathematics (Parts 1 and 2 ).e Science (Physics ande Chemistry).e
Superior students who do very well in Grade XIII, but who do not have the full Grade XII prescription (above), may still apply and be considered for admission.
(b)e Grade XIII Program:e Applicants must also have completed at least four Grade XIIIe subjects, comprising at leaste seven credits.e
The following list indicates thee Grade XIII subjects that aree approved for admission to thee

University of Toronto, and indicates their credit value:
(i)e One Credit: Biology, Chemistry, Physics, Geography,e History and one of Art or Music*.e
(ii) Two Credits: English, French, German, Greek,e Hebrew**, Italian, Latin,e Russian, Spanish, ande Mathematics A (alone).e
(iii)e Three Credits: Mathematicse A and Mathematics B (together).e
(c) Standardized Tests: Ontario Grade XIII students should present the results of their aptitude and achievement tests offered by the Service for Admission to College and University or through the Department of Education.
2)e Minimum Requirements for Ad mission of Non-Ontario Students: Students from outside of Ontarioe should write to the University's Officee of Admissions, indicating theire interest in studying at Scarboroughe College and specifying theire academic training and standing. Ife
*In lieu of Grade XIII Music, applicantse may have completed one of thee following examinations of the Royale Conservatory of Music of Torontoe or their equivalent:e
(i)e Grade VIII Practical with Grade Ile Theory; or
(ii)e Grade IV Theory. The markse obtained on these examinationse are not counted (for thee University's purposes) in thee student's Grade XIII average.e
**Because there is no Department of Education Curriculum for this
language, interested applicants should consult the Director of Admissions of the University of Toronto.
applicants appear to qualify for consideration, they will be mailed an application form and further instructions. Write to:

The Office of Admissions,
Simcoe Hall,
University of Toronto,
Toronto 5, Ontario,
Canada.
A general indication of the minimum requirements expected of nonOntario students may be found in the University's Undergraduate Admission Circular 1969-70, obtainable from the Office of Admissions.
3)e Minimum Requirements for Ontario Applicants of Mature Age: Students who are at least twenty-fivee years of age, and who have beene residents of Ontario for at least onee year, may be considered for admission even if they do not meet the minimum requirements set for lesse mature students.e
Persons seeking admission as
"mature students on probation",e must:e
(a)e have a sound, if incomplete,e academic record; ande
(b)e indicate their capability ofe further academic work by obtaining a mark of at least $60 \%$ in ate least one Grade XIII subject, or itse equivalent.e
To meet this requirement manye students take the courses in PreUniversity English or Pre-
University Mathematics offered bye the Division of University Extension. For further information one these courses write:e

Division of University Extension, University of Toronto, 84 Queen's Park Crescent, Toronto 5, Ontario.

Only a limited number of places are reserved for probationary mature students. Consequently, meeting the minimum requirements by no means assures admission. The quality of past academic work, and the quality of Grade XIII courses are considered in selecting applicants Mature students are on probation. If they fail one year, they are not eligible for re-enrolment until they meet the full Grade XIII requirements.
4) Procedures for Application: Ontario Students
Students from Ontario who aree completing Grade XIII apply fore admission to Scarborough Collegee through their high schools.e
1)eThey complete the SACUe (Service for Admission to Collegese and Universities) form, indicatinge the University of Toronto as theire first choice.e
2) eThey then receive the University of Toronto "Supplementarye Application Form'. They completee this form indicating Scarboroughe
College as their first choice.e Well-qualified Ontario students may be granted "early final admission" Students with good results on their Ontario aptitude tests, in their Grade XII work, and in their early Grade XIII work, may be admitted shortly after 15 May 1969, conditional only on their successful completion of Grade XIII. The consideration of applications from less well-qualified students will be postponed until final Grade XIII results are submitted.
Applications to be considered for early final admission have been requested by 1 March 1969. Applications to be considered at all
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should be submitted before 1 June 1969.
5) Procedures for Application; NonOntario Students
For application forms, students should write:

The Office of Admissions, Simcoe Hall,
University of Toronto, Toronto 5, Ontario.
Applications must be ordered, completed and returned before 1 June 1969.
6) Selection from among Qualified Applicants
The University of Toronto will be unable this year materially to increase its number of undergraduate places to meet the probable demand for them, Consequently, it will probably be necessary for the University and for each of its Colleges to limit its enrolment. Under the University's admission practices, the school record of the applicant, the confidential report of the school and other available tests of the student's ability are considered. The length of time in secondary school and the number of sittings needed to obtain entrance requirements are also taken into account.

## REGISTRATION

Before they register, students must pay the first instalment of their fees. Guidance regarding payment of fees is contained in the next section of this calendar.

Students are also strongly advised to discuss their proposed programs with members of the academic staff before they register. The new academic program of the University
allows students freedom in the planning of their academic programs. To use this freedom wisely, students should avail themselves of the counselling services available to them. They should seek information about the content and quality of various courses in which they are interested and huw to build them into a coherent, purposeful program.

Counselling is available to Scarborough College students in two basic forms: group counselling and individual counselling. Group counselling sessions will be held at varioustimes during the year, but especially in the pre-registration and registration periods. At group counselling sessions, students will have the opportunity to talk, in a relaxed manner, both with members of the faculty from various disciplines and with other students. In this way students may learn of the courses they plan to take from both the faculty and the student point of view.

In addition to group counselling, students are invited to consult individually with members of the faculty. At least one faculty membe, in each discipline will be available for consultation about academic and other matters throughout the year. Members of the faculty stand ready to talk with students about their individual courses.
pre-registration
Every student is expected to preregister before September for his proposed courses of study. Students already at the College who will be proceeding to a higher year are asked to pre-register late in the Spring term. Students newly admitted to the College will be asked to pre-register during the summer.

The pre-registration information will be used in the planning of the timetable and in the planning of teaching assignments. In this way it is hoped that timetable conflicts will be reduced to an irreducible minimum, and that there will be room in each class for all students who wish to take it. If an unavoidable timetable conflict, or an irremediable class limitation, makes it impossible for any student to pursue his proposed program, he will be notified by mail in advance of the actual fall registration date.

Students may make course changes after they have preregistered and indeed after they have actually registered any time up until 15 October (for full-year courses and fall-term courses) or until January 30, for spring-term courses. For this purpose students must complete a "Course Change" form at the Registrar's Office.
registration time table
Every student proceeding to a degree is required to register at the College Registrar's Office according to the following schedule:
First-Year Students:
Metropolitan Toronto Residents:
Thursday, September 11
9.00 a.m. to 12.00 noon A - G
2.00 p.m. to 4.00 p.m. H - L

Friday, September 12
9.00 a.m. to 12.00 noon M - Se
2.00 p.m. to 4.00 p.m. Sf - Z

Outside Metropolitan Toronto:
Monday September 15
9.00 a.m. to 12.00 noon $A$ - M
2.00 p.m. to 4.00 p.m. $N-Z$

Second-Year Students:
Tuesday, September 16
9.00 a.m. to 12.00 noon A - G
2.00 p.m. to 4.00 p.m. H - L

Wednesday, September 17
9.00 a.m. to 12.00 noon M - Se
2.00 p.m. to 4.00 p.m. Sf - Z

Third-Year Students:
Thursday, September 18
9.00 a.m. to 12.00 noon A - I
2.00 p.m. to 4.00 p.m. J - R

Friday, September 19
9.00 a.m. to 12.00 noon S - Z

Students will not be registered during registration week at other times than those designated. Second and third year students may make arrangements to register in the week preceding registration week.
A late fee is charged for registration after 19th September. Requests for refund of this fee will be entertained at the Registrar's Office if the lateness was beyond the student's control.

CONFIRMATION OF PROGRAMS:
Students must confirm their programs with the College Registrar's Office by 20 November, 1969 ,
A charge of one dollar per day, to a maximum of $\$ 20$, is made for late confirmation.

## FEES

sessional fees
A student enrolling in the Faculty of Arts and Science is required to pay at least the First Term instalment of fees before registering.
See Table on p. 74.
The Second Term instalment of fees is payable on or before 20 January. After this date an additional

78 charge of \$3 per month, or portion thereof (not exceeding \$10), will be imposed until the whole amount is paid. All fees for the session must have been paid in full before the student may receive his examination results or be credited with standing for his year. In order to avoid delay in registration at the opening of the session it is recommended that the First Term instalment be paid by mail as early as possible.

Fees are payable at the office of the Chief Accountant, 215 Huron Street, University of Toronto. During the registration days only, fees will be accepted at the College Registrar's Office. Cheques or money orders should be payable to the University of Toronto, negotiable at par in Toronto. Adjustments for withdrawals are made up to the 24th week only.

## OTHER UNIVERSITY FEES

Each student is required to pay such of the following fees as may be required of him:

## application fee

Each applicant who is not in full time attendance at a Canadian high school, or who has not previously registered at the University of Toronto, is required to pay a $\$ 10.00$ application fee. The fee is a service charge and is non refundable.

## advanced standing fee

Each student who has been admitted to advanced standing from another university of college must pay $\$ 10.00$.

## supplemental examination fee

Each student who applies to write a supplemental examination either at
the annual examination in May or the supplemental examination in August must pay this fee on or before 1 December if writing at the annual examination, or 10 July if writing at the August examination.
One subject
$\$ 10.00$
Each additional subject $\quad 5.00$
FEE FOR LATE APPLICATION FOR
EXAMINATION
Each student who fails to file his application for either the annual or the supplemental examination by the date appointed for the receipt of such must pay $\$ 1.00$ for each day's delay, with a maximum of $\$ 20.00$.
late registration fee
Each student who registers after the last day for normal registration must pay a late registration fee of $\$ 10.00$ plus $\$ 1.00$ for each day of delay to a maximum of $\$ 20.00$.
outside centre fee
Each student who applies to write an examination outside Toronto must pay this fee on or before 1 December if writing at the annual examination, or 10 July if writing at the August examination. An additional fee of $\$ 5.00$ must be paid for each additional examination.
special examination fee
Each student who is granted permission to write a special examination must pay a fee of $\$ 10.00$.

## miscellaneous fees

Fee for transcript of record . . . . $\$ 1.00$ (For each additional copy ordered at the same time, 25ф).
Fee for checking marks... $\$ 5.00$ (Refund to be made if error is found).

SESSIONAL FEES: BACHELOR OF ARTS AND BACHELOR OF SCIENCE

| $*$ Academic <br> Fee | $* *$ Incidental <br> Fee | Total | First <br> Instalment | Second Instalment <br> (Due 20 Jan. 1970) |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Men | $\$ 470$ | $\$ 50$ | $\$ 520$ | $\$ 285$ | $\$ 238$ |
| Women | 470 | 44 | 514 | 279 | 238 |

Please note that fees are subject to change without notice.
*The Academic Fee includes fees for Tuition (\$417), Library and Laboratory, Examination, Degree, and Physical Education
**The Incidental Fee includes: for men Hart House, Students' Administrative Council, Athletic, Health Service, Scarborough College Student Society; for women Students' Administrative Council, Athletic, Health Service, Scarborough College Student Society.

Financial assistance is available in one or a combination of three forms: - Scholarships: Awarded to students for academic excellence, without reference to financial need. - Bursaries: Awarded to students who demonstrate both good academic achievement and financial need.

- Interest-free loans: provided to students who demonstrate financial need. Students must repay loans or assume interest payments after termination of studies

Scarborough College students may qualify for awards offered by the Province of Ontario, the University of Toronto, or Scarborough College itself.
ontario student awards programme
All students who are Canadian citizens or landed immigrants and who have been Ontario residents for one year prior to beginning their programmes of study are eligible for OSAP.
Students are awarded funds to assist them in meeting academic costs where their own resources, and (in the case of dependent students) their parents' resources, are insufficient.

Awards are part grants and part loans, except in the case of small awards which are wholly loans. In the 1968-69 programme, awards under this plan have varied widely from as little as $\$ 50$ to as much as $\$ 2,000$, depending on need.

OSAP should be regarded as the primary source of financial assistance for needy Ontario students.

Application forms may be obtained from the Office of the Registrar (284-3127). Students are urged to apply early in the summer. Students who wait until registration day in September may have to wait several months for assessment of their applications.

OSAP applications should be submitted by 31 October 1969. Applications submitted after this date but before 31 January 1970 will be considered for one-half the normal assistance. Only in cases where a sudden change in circumstances creates grave need will applications be accepted after 31 January 1970.

Both the OSAP rules and the OSAP application form are complicated. Please do not hesitate to seek help from the Registrar's Office in completing your application.

UNIVERSITY OF TORONTO ADMISSION (FIRST
YEAR) SCHOLARSHIPS AND BURSARIES YEAR) SCHOLARSHIPS AND BURSARIES. Students entering the first year at Scarborough College with excellent high school records are eligible for a large number of scholarships awarded by the University of Toronto and also by the College. Admission scholarships and bursaries are described in the booklet, University of Toronto Admission Awards, 1969-70, available at any Ontario high school or obtainable from:

Office of Student Awards
Simcoe Hall
University of Toronto
Toronto 5.
For most University of Toronto Admission Awards students must complete application forms. These are available at Ontario high schools
or from the University (address above)

Most admission awards are for one year only. Some admission awards are continuing: winners are given a certain amount of money annually, conditional on the maintenance of excellent standing.

SCARBOROUGH COLLEGE ADMISSION (FIRST YEAR) AWARDS
A number of admission awards are available exclusively to students entering Scarborough College. These are listed below. All students with excellent academic records who are admitted to the College will be considered for these scholarships whether or not they have submitted applications.
The Agincourt Lions Club Scholarship

Gift of the Agincourt Lions Club, this scholarship is awarded to a student with first-class standing entering Scarborough College directly from any secondary school in the Borough of Scarborough. Value: $\$ 300$.

Landon Bladen Scholarship
Gift of Professor V. W. Bladen, this scholarship is awarded to a student with first-class standing entering the first year at Scarborough College. Value: \$300.

Borough of Scarborough Admission Scholarship
One of a number of gifts of the Borough of Scarborough (through the good offices of the Scarborough College Foster Alumni Association), this scholarship is awarded to a student with first-class standing entering the first year at
Scarborough College. Value: $\$ 350$.
I.O.D.E. Isabel Rutter Chapter Admission Scholarship
One of three gifts of the Imperial Order Daughters of the Empire, Isabel Rutter Chapter, this scholarship is awarded to a student with first-class standing entering Scarborough College directly from any secondary school in the Borough of Scarborough. Value: $\$ 200$.

Scarborough College Foster Alumni Association Admission Scholarship One of several gifts from the Scarborough College Foster Alumni Association, this scholarship is awarded to a student with first-class standing entering the first year at Scarborough College. Value: $\$ 350$.

Scarborough College-Varsity Fund Continuing Scholarships
Gift of the Varsity Fund, four continuing scholarships are awarded to students with high, first-class standing entering the first year at Scarborough College. Value: $\$ 350$ in the first year; $\$ 500$ in no more than three subsequent years.
Continuation of the awards is conditional on the maintenance of first-class standing.
Township of Pickering Admission Scholarship
One of two gifts of the Township of Pickering, this scholarship is awarded to a student with high standing entering the first year at Scarborough College. Preference is given to Township of Pickering students. Value: $\$ 250$.

UNIVERSITY OF TORONTO IN-COURSE (SECOND AND THIRD YEAR) SCHOLARSHIPS
Scarborough College students who achieve excellent standing in an
academic year may compete for a number of scholarships administered by the University of Toronto.

These scholarships are listed in the Awards Calendar of the Faculty of Arts and Science.
SCARBOROUGH COLLEGE IN-COURSE (SECOND AND THIRD YEAR) SCHOLARSHIPS AND OTHER AWARDS
A number of in-course awards are available exclusively to Scarborough College students. All students in the College who achieve excellent academic standing in an academic year will be considered.
Governor General's Silver Medal
This medal is awarded to the student with the highest standing in the graduating class of Scarborough College.

## Borough of Scarborough

Scholarships
Two of several gifts of the Borough of Scarborough, these scholarships are awarded: (a) to the student with the highest standing in first year who enters the second year at Scarborough College; and (b) to the student with the highest standing in second year who enters the third year at Scarborough College. Value: \$500 each.

## I.O.D.E. Isabel Rutter Chapter

 ScholarshipsTwo of three gifts of the Imperial Order, Daughters of the Empire, Isabel Rutter Chapter, these scholarships are awarded to students with first-class standing: (a) in the first year, entering the second year at Scarborough College; and (b) in second year, entering third year at the College. Value: $\$ 200$.

Township of Pickering Scholarship One of two gifts of the Township of Pickering, this scholarship is awarded to a student achieving first-class standing in first or second years, and entering second or third years at Scarborough College. Township of Pickering students are preferred. Value: $\$ 250$.
bursaries
University of Toronto In-Course Bursaries
Students in their second or third years at Scarborough College, who are in financial need and who have achieved a good academic record (at least B+) are eligible to apply for University of Toronto In-Course Bursaries.

Application forms are available at the Registrar's Office.

Applications must be submitted before 15 October 1969.
Scarborough College Bursaries Gifts of the Borough of Scarborough, the Township of Pickering and others, made available through the Scarborough College Foster Alumni, these bursaries are awarded to students in real financial need who are making satisfactory academic progress.

Applications, available from the Registrar's Office, must be submitted by 16 January 1970. Value: $\$ 150$.
Scarborough College Special Bursaries
Made available from funds allocated by the Senate of the Liniversity of Toronto, these bursaries are awarded to students in real financial need who are making good academic progress.

Applications, available from the Registrar's Office, must be submitted by 16 January 1970. Value: $\$ 250$ for some awards; $\$ 150$ for others.
emergency assistance
Faculty Bursary Fund of Scarborough College
An emergency, short-term loan fund has been established from gifts of Scarborough College faculty members and others. Any student requesting short-term loan assistance in order to carry on with his education is asked to see the Registrar.
Other Emergency Assistance
Any student who finds himself in serious need of assistance in order to carry on with his education should not hesitate to see the Registrar. Some limited sources of assistance (other than those listed above) are available.

## STUDENT SERVICES

General Counselling Services
In addition to the academic
counselling (which is provided by members of the faculty and is described in earlier sections of this Calendar), and to psychiatric counselling (which is provided by the Health Service - see below) general counselling is available through the Registrar and his staff. Any student who wishes to discuss his study, financial or personal problems, career planning, or further studies may consult with the experienced and sympathetic counsellors.
Health Service
The University of Toronto Health

Service operates a clinical consulting facility at the College. A registered nurse is in attendance from 10.00 a.m. to 5.00 p.m. on all weekdays during the academic term. Physicians are in attendance each morning and afternoon.

A psychiatric service is also provided. A psychiatrist is available for consultation on a regular weekly basis during term. Assistance with emotional problems and anxieties is available through both the general physicians and the psychiatrist.
Medical attention is clinical.
Students are referred elsewhere for any further treatment that may be necessary.
Placement Service
The Registrar's staff collaborates with the University of Toronto Placement Service in providing extensive services to students seeking employment and opportunities for postgraduate study.
A reading room is maintained, where material on employment and graduate studies is available.
Each year in January and February a program of employment interviews is arranged. Many businesses and also governments send their personnel officers to interview members of the graduating class.
Housing Services
Students who wish to find room and board, or who wish to locate in their own apartments, are invited to consult the housing registry maintained by the Registrar's staff.

During the registration period for 1968-69, the College was able to provide (through the co-operation of the Scarborough College Foster

84 Alumni Association) local transportation to students to assist them in selecting accommodation.

## ACCOMMODATION

Co-operative Residences
In 1968-69 the Scarborough College Student Society operated co-op residences in four small houses located within five minutes walk of the College. In 1968-69 the residences were occupied exclusively by men but consideration is being given to making at least one house available to women in 1969-70. Fees, payable in advance, are $\$ 154$ for the fall term and $\$ 198$ for the winter term.

The residences included furnished double bedrooms, shared living rooms and shared kitchens equipped with stove, refrigerator, cooking utensils, dishes and cutlery. Residents supplied their own
blankets, linen and towels. Rules were made and administered by the residents.
Application forms for the Co-Operative Residences and for the Nurses' Residence (see below) are available from, and should be returned to, the Registrar's Office of the College. The number of places in the Co-op Residences is very limited and preference will be given to early applicants. A deposit of $\$ 10$ is required.
Scarborough Regional School of Nursing Residence
This residence offered accommodation to considerable numbers of Scarborough women students. The residence is located approximately one mile from the College: within walking distance and connected by a major bus route

Residents in 1968-69 were charged $\$ 42.50$ per month. The Residence has a cafeteria.

REGULATIONS ABOUT UNSATISFACTORY WORK

## 1 Suspension from Attendance in

 the Faculty:A student in the New Program will normally be refused registration in the Faculty for one year if he fails three courses in any year
2 Refused Readmission to the Faculty:
A student in the New Program will be refused further registration or examination in the Faculty if
(a) he fails four courses in his first ten attempts, and at the time of his fourth failure has an average in all courses attempted of less than $55 \%$, or
(b) he fails five courses in his first fifteen attempts, or
(c) he fails six courses. Failed supplemental examinations in first year do not count as second failures.
A student in the General Arts or General Science Course will not be permitted further registration or examination in the Faculty if, on two occasions at this or another university or both, he shall have failed to obtain standing in his year.

## 3 Debarred:

In cases of unsatisfactory work of a very serious nature, the Faculty

Council may recommend to the Senate that a student be debarred from the University.

Summary of regulations of the caput CONCERNING STUDENT DISCIPLINE
Subject to the general regulations of the Caput of the University regarding jurisdiction in matters of discipline the Council of University College, the governing bodies of the Federated Universities and Affiliated Colleges, and the Councils of the Faculties, Schools, and institutes have disciplinary jurisdiction over the conduct of all students registered in these Divisions of the University in all matters of local or internal concern to these Divisions. Jurisdiction over the conduct of students while in residence regardless of the Division of the University in which they are registered is vested in the body administering the residence. Where the appropriate body exercising disciplinary jurisdiction has found that a student of the University has engaged in conduct prejudicial to the interests of the University, the Caput may, in its discretion, suspend or expel such student from the academic privileges of the University. Every decision of the Caput involving the expulsion of a student from the University requires confirmation of the Board of Governors.


Administration and Faculty

THE UNIVERSITY
President
C. T. Bissell, M.A., Ph.D., D.Es.L., D.Litt., LL.D., F.R.S.C.

Executive Vice-President (Academic) and Provost
J. H. Sword, B.A., M.A

Executive Vice-President (Non- Academic)
A. G. Rankin, B.Comm., C.A

Vice-President and Registrar
R. Ross, M.B.E., M.A.

Vice-President and Dean of the School of Graduate Studies
E. Sirluck, M.B.E., B.A., M.A., Ph.D., LL.D., F.R.S.C.

Vice-Provost and Executive Assistant to the President
D. F. Forster, B.A., A.M.
the faculty of arts and science
Dean
A. D. Allen, B.Sc., Ph.D.

Associate Dean
A. C. H. Hallett, B.A., Ph.D.

Associate Dean
G. A. B. Watson, M.A., S.T.B.

Assistant Dean and Secretary
W. D. Foulds, B.A.
the college
Principal
A. F. W. Plumptre, C.B.E., B.A., M.A.

Dean
S. J. Colman, B.A., M.A.

Assistant Dean
J. Riddick, B.Sc., Ph.D.

Librarian
J. L. Ball, B.A., M.A

Registrar
A. J. G. Patenall, B.A., M.A., Ph.D.

Assistant Registrars
N. H. Dobbs, B.A
D. Keeling, M.A.

## division of humanities

## Chairman

P.H. Salus, B.S., A.M., Ph.D.

CLASSICS
N. E. Collinge, B.A., M.A., Ph.D.,

Protessor
Miss A. Boddington, B.A. Associate Protessor
J. R. Warden, B.A., M.A.,

Associate Professor
J. Corbett, B.A., M.A., Ph.D.,

Assistant Protessor
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