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REPORT OF THE PRESIDENT  
OF THE UNIVERSITY OF BRITISH COLUMBIA  
FOR THE ACADEMIC YEAR ENDED  
AUGUST 31st, 1939.

Pp 1.4.57.8.9-10.12.14

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REPORT OF THE PRESIDENT

To the Board of Governors and  
the Senate of  
The University of British Columbia.

Gentlemen:

I have the honour to submit the following report on  
the work of the University for the academic year ended August 31st,  
1939:

Teaching Staff:

The numbers in the teaching staff for the academic year  
1938-39, were as follows:

Deans of Faculties.....	3
Professors.....	38
Associate Professors.....	20
Assistant Professors.....	24
Lecturers.....	13
Instructors.....	19
Honorary Lecturers.....	10
Part-time Lecturers.....	33
Assistants.....	65
<u>TOTAL... 225</u>	

New Appointments:

Ellis H. Morrow, B.A.(Queen's), M.B.A.(Harvard), Professor and  
Head of the Department of Commerce.  
Maxwell A. Cameron, M.A.(Brit.Col.), Ph.D.(Toronto), Associate  
Professor and Acting-Head of the Department of Education.  
Henry Cecil Gunning, B.A.Sc.(Brit.Col.), M.S., Ph.D.(Mass.Inst.  
of Technology), F.R.S.C., Professor of Geology.  
Frederick Thomas Tyler, B.Sc., M.A., B.Ed.(Alberta), Ph.D.(Calif.),  
Assistant Professor of Education and Psychology.  
Ronald Hilton, M.A.(Oxon.), Assistant Professor in the Department  
of Modern Languages.  
Charles Ernest Borden, M.A., Ph.D.(Calif.), Assistant Professor in  
the Department of Modern Languages.  
Lawrence E. Ranta, M.D., D.P.H.(Toronto), Assistant Professor in the  
Department of Bacteriology and Preventive Medicine.

- 8. Joseph A. Crumb, B.B.A.(Wash.), M.S., Ph.D.(Calif.), Lecturer in the Department of Economics, Political Science, Commerce and Sociology.
- 9. Archibald W. Currie, B.A., B.Com.(Queen's), M.B.A., Dr.Com.Sc. (Harvard), Lecturer in the Department of Economics, Political Science, Commerce and Sociology.
- 10. John H. Creighton, M.A.(Toronto), Lecturer in the Department of English.
- 11. Harold D. Smith, M.A.(Brit.Col.), Ph.D.(Toronto), Lecturer in the Department of Physics.
- 12. Kenneth C. Mann, B.A.(Sask.), Ph.D.(Toronto), Lecturer in the Department of Physics.
- 13. J. F. Muir, B.Sc.(Manitoba), Lecturer in the Department of Civil Engineering.
- 14. Walter V. MacDonald, B.A.Sc.(Brit.Col.), Instructor in the Department of Civil Engineering.
- 15. Charles Bruce Wood, B.A.(Toronto), A.M.(Columbia), Assistant Registrar, formerly Lecturer in the Department of Education.

#### Promotions:

- Gordon M. Shrum, M.A., Ph.D.(Toronto), F.R.S.C., from Associate Professor to Professor and Head of the Department of Physics.
- William F. Seyer, B.A., M.Sc.(Alberta), Ph.D.(McGill), from Associate Professor to Professor of Chemistry.
- Albert C. Cooke, B.A.(Manitoba), M.A.(Oxon.), from Assistant Professor to Associate Professor of History.
- J. F. Muir, B.Sc.(Manitoba), from Lecturer to Associate Professor of Civil Engineering.
- Archibald W. Currie, B.A., B.Com.(Queen's), M.B.A., Dr.Com.Sc. (Harvard), from Lecturer to Associate Professor in the Department of Commerce.
- Harold D. Smith, M.A.(Brit.Col.), Ph.D.(Toronto), from Lecturer to Assistant Professor in the Department of Physics.
- Kenneth C. Mann, B.A.(Sask.), Ph.D.(Toronto), from Lecturer to Assistant Professor in the Department of Physics.

#### Resignation:

- Dr. Wessie Tipping, Assistant Professor in the Department of Modern Languages.

### Changes in Personnel in the University Health Service:

On September 26th, 1938, Dr. Stewart Murray, M.D., D.P.H. (Toronto), Senior Medical Health Officer of the Metropolitan Health Committee, was appointed University Health Officer.

Upon the resignation of Dr. Kenneth F. Brandon, Dr. John S. Kitching, B.A., M.D., D.P.H. (Toronto), Assistant Senior Medical Health Officer of the Metropolitan Health Committee, succeeded Dr. Brandon as Director of the University Health Service.

### Leaves of Absence:

Henry F. Angus, Professor and Head of the Department of Economics, Political Science, Commerce and Sociology, - to continue as a member of the Royal Commission on Dominion-Provincial Relations.  
 Ira Dilworth, Professor of English, for one year as from September 25th, 1938.  
 Alexander Hrennikoff, Instructor in the Department of Civil Engineering, for the Session 1938-39.  
 Leonard Richardson, Professor of Mathematics, granted leave for the fall term on account of illness.

### Appointments Necessitated by Leaves of Absence:

W. Ivor Jennings, M.A., LL.B. (Cantab.), LL.D. (London), Lecturer in English Law at the University of London and in the London School of Economics, - Special Lecturer in the Department of Economics, Political Science, Commerce and Sociology.  
 Mrs. Jean Fisher Sargent, M.A. (Brit. Col.), Ph.D. (Toronto), Lecturer in the Department of Mathematics during the absence of Professor L. Richardson.

### Re-appointment Following Attainment of Retiring Age:

After reaching the retiral age in 1936, Mr. John Ridington, Librarian, was re-appointed each succeeding year thereafter for three years. In 1939 he was again re-appointed for a further period of one year to August 31st, 1940.

Obituary:Mrs. Leonard S. Klinck:

On May 19th, 1939, following a long illness, Mrs. Klinck passed away. The many kindnesses which were shown to my son and myself at that time by members of the University, and the messages of sympathy which their letters of condolence conveyed, will never be forgotten by either of us. And because our appreciation of what was done and said then is so deep and abiding, I cannot but record the fact that we shall always remember with gratitude the tributes of respect and affection which were paid to Mrs. Klinck's memory, more particularly those which referred to the influence of her life on the life of the University.

Honorary Degree:

His Excellency the Right Honourable Lord Tweedsmuir, Governor-General of Canada, graciously accepted the degree of LL.D (Honoris Causa) at a Special Congregation on March 17th, 1939.

Re-election of Dr. Robert E. McKechnie as Chancellor:

In the Senate Elections held in 1939, Dr. Robert E. McKechnie was re-elected Chancellor by acclamation. This is the eighth time that Dr. McKechnie has been elected to the Chancellorship, the last seven elections being by acclamation.

Appointment of Members of Senate by the Lieutenant-Governor-in-Council:

By Order-in-Council the following persons were appointed members of Senate for a period of three years from June 9th, 1939:

Mr. J. Newton Harvey  
Mr. H. N. MacCorkindale  
Mrs. J. W. de B. Farris.

Celebration of Dr. Leonard S. Klinck's Twentieth Anniversary as President:

June 1st, 1939, marked the twentieth anniversary of Dr. Klinck's appointment as President of the University of British Columbia. To him, this occasion was made memorable by two gracious incidents: The Board of Governors spread upon their records a resolution of appreciation for the services rendered, and Convocation presented an address and gift on behalf of the governing bodies, the alumni and students of the University.

### Visit of Their Majesties to British Columbia:

Their Majesties the King and Queen visited Vancouver on May 29th, 1939. In connection with plans for their reception, a civic committee was appointed on which the University had two representatives. In the course of their tour around the city, Their Majesties drove through the University grounds which were appropriately decorated for the occasion.

### Constitution of a Department of Commerce:

Out of the existing Department of Economics, Political Science, Commerce and Sociology, a separate Department of Commerce was constituted by the Senate and the Board of Governors. Following the establishment of this department, the name of the former department was changed to "Department of Economics, Political Science and Sociology".

### Completion of the Report on the Geology of Hong Kong:

The Report on the Geology of Hong Kong, which had been undertaken by the late Dean R. W. Brock in collaboration with Dr. S. J. Schofield, Dr. M. Y. Williams, the late Dr. W. L. Uglow and Dr. T. C. Phemister, was completed during this period and dispatched to the Colonial Government of Hong Kong.

### Grant for Medical Research:

Following the visit of Sir Frederick Banting to the University to investigate the facilities for Medical Research, a grant of \$1,250.00 was made by the Associate Committee on Medical Research of the National Research Council of Canada to Dr. C. E. Dolman, to assist in furthering certain of his investigations into problems in preventive medicine.

### Increase in Fees for Graduate Students:

Under the resolutions of the Board of Governors which provided for a general increase in undergraduate fees, effective in the academic year 1938-39, no increase was made in the fees of graduate students. During the period under review, graduate fees were increased from \$75.00 to \$125.00. The new schedule became effective at the opening of the 1939-40 session.

## Annuities for Clerical and Mechanical Staffs:

Under the agreement which the University entered into with the Teachers Insurance and Annuity Association of America in 1924, provision was made for annuities for members of the Faculty and administrative officers. No provision, however, was made in this plan for members of the mechanical and clerical staffs.

In June, 1939, the Board of Governors approved and made operative a superannuation scheme for all employees who were not eligible under the terms of the agreement with the Teachers Insurance and Annuity Association. For this group the Dominion Government Annuity plan was adopted.

## Utilization of the Carnegie Corporation Music Set:

In order to ensure the maximum care of this set, and to prolong the life of the records without restricting their legitimate use, a Committee was appointed to draft rules and regulations for the administration of the set. Experience has shown that these regulations have been practical and effective and have not interfered with the use of the set.

The report submitted by the Committee shows that the records have been used very extensively during the past year. In concluding its report the Committee says:

"The Carnegie Music Set has made it possible for this University to offer the best in music, not only to its undergraduates, but also to a great number of adults and thus to take some part in developing the artistic tastes of those seeking a more mature philosophy of living".

## Endowment of the Geldart Riadore Bursary Fund:

The offer of a graduate in Agriculture in the University of British Columbia to donate, anonymously, the sum of \$5,000.00 to his Alma Mater for the purpose of endowing a Bursary Fund in the Faculty of Agriculture to be known as the Geldart Riadore Bursary, was approved by the Senate and accepted by the Board of Governors.

## Statement Respecting the Acknowledgment of Gifts:

Gifts to departments are acknowledged by the Head of the Department receiving the donation. In the case of the more important gifts, whether to a Department or to the University as a whole, a letter of thanks is sent to the donor by the Honorary Secretary of the Board of Governors or by the President. When scholarships or prizes are made available by private individuals or by organizations,

announcement of these is made in the Calendar. The list of gifts received during the year is much too lengthy to include in this report, so lengthy, in fact, that it may be advisable in the near future to issue a separate publication listing the gifts received, together with the names of the donors.

#### Intercollegiate Live Stock Judging Contest:

At the Pacific International Live Stock Exposition which was held in Portland, Oregon, in October, the judging team entered in the competition by the University of British Columbia was successful in winning the Intercollegiate Judging Contest in Dairy Cattle. The challenge cup awarded to the winning team now becomes the property of the University, having been won five times during the last twenty years.

#### Transfer of the Wireless Station to the Military Reserve:

In the spring of 1939, the District Officer Commanding Military District Number 11 appeared before the Board of Governors in reference to the matter of the site for a gun emplacement at the tip of Point Grey. As the site first suggested by the Department of National Defence would destroy the forest belt, and be less suitable for the purposes the Department had in view, the Officer Commanding proposed that the battery be situated on the property occupied by the Wireless Station, and that the Station be transferred to a part of the ten acres set aside on the campus as a Military Reserve. The Board of Governors signified its willingness to concur in the proposed exchange of sites, provided that the two Dominion Departments most directly concerned were agreeable to the transfer; and, further, that any buildings which might be erected upon the Military Reserve on the campus would be in architectural conformity with the University buildings.

#### Plans for the Erection of the Brock Memorial Building:

During the year under review, plans for the erection of the Brock Memorial Building, which had been formulated in 1935 in connection with the programme for the celebration of the 21st Anniversary of the opening of the University the following year, were revised and, largely through the initiative of the students, a renewed and successful effort was made to finance the construction of the building.

The Board of Governors, with the consent of the Lieutenant-Governor-in-Council, granted a sum of \$2500.00 per annum for a period of ten years to facilitate the erection of the building, and voted a sum of \$4000.00 for the installation of service connections.

The building, it was decided, was to be of Class "B" construction, and was to be erected on the site designated in the architects' plans for a students' union building.

### Co-operative Projects with the Dominion and the Provincial Departments of Agriculture:

During this period the Dominion Department of Agriculture made a substantial grant to enable the Department of Agronomy in the University to continue its fundamental researches with alfalfa. At the Dominion Experimental Farm at Agassiz, co-operative experiments with barleys and pastures were conducted; at another point, these two organizations carried on joint investigations with potatoes. The Dominion Department of Agriculture also made a grant to the Department of Horticulture in the University for the establishment of vegetable seed testing trials. For these projects the Dominion Department of Agriculture made available the sum of \$1,450.00.

The Provincial Department of Agriculture and the Department of Agronomy in the University entered into a co-operative agreement for the production and distribution of elite stock seed of certain field crops for use by the farmers of the province. The results of the first year's work have demonstrated the wisdom of the plan, and arrangements have been completed for extending the scope of the operations next year.

A generous grant of \$500.00 by the Safeway Stores Limited, has assured the continuance of the vegetable seed testing trials for 1940.

### Educational Programme for British Columbia Fishermen:

An introductory short course for the fishermen on this Coast was held during the third week in January. Rev. J.D. Nelson MacDonald of the staff of St. Francis Xavier University was the principal lecturer. He was assisted by members of the staff of the University of British Columbia and by others interested in the problems of the British Columbia fishermen. The attendance and interest far exceeded the expectations of the Director of the Department of University Extension under whose direction the course was organized and conducted. The co-operation of the Dominion and Provincial Departments most directly interested was whole-hearted, and the response on the part of the fishermen and of the fishermen's co-operative associations was equally enthusiastic. A generous grant of \$5,000.00 from the Dominion Department of Fisheries ensures the continuance and expansion of the Department of Extension's educational programme with fishermen for the coming year.

## Projects Under the Special Grant for Research:

At a meeting of the President and the Deans the following research projects were unanimously agreed upon for the fiscal year 1939-40. The grants for these investigations were not made, as a rule, to individual departments nor yet to single faculties but were voted for projects which, in a number of instances, involved work in two or more faculties:

New Flotation Reagents Research; Gold Research; Undulant Fever; Genetics of Economic Plants; Effect of Radiation on Animal Growth and Behavior; Effect of Unbalancing the Diet; Thymus Gland and its Functions; Coccidiosis; Glucuronidase; Preservation of Fishing Nets; An Investigation of the Preparation of Superactive Charcoal and a further study of its Properties; The Reduction of Ores by Natural and Coal Gases; The Elimination of Arsenic from Gold-Bearing Ores; The Use of Rare Earth Oxides as Catalysts; Separation of Columbium and Tantalum; Flotation; The Solvent Extraction of British Columbia Coal and Shale; Spectroscopic Analysis; Causes of Raspberry Failure Research; British Columbia Fish Oils Research; Activators for Enzymes Research; Fowl Paralysis Research and Surface Taint Butter.

## Report of the President on the Enlargement and Improvement of the Summer Session:

Pursuant to a resolution of the Board of Governors, the President prepared a report, with recommendations, on the enlargement and improvement of the Summer Session. In this report an attempt was made to indicate clearly the present status of the Summer Session and to outline in some detail the policy for the future.

The more important of the recommendations, as adopted, are as follows:

That the minimum registration in any given course be left to the discretion of the Director of the Summer Session in consultation with the President.

That appointments to the teaching staff be made to Departments as a whole and not to named courses.

That the policy of bringing in lecturers of distinction from other Universities be continued.

That the number of distinguished lecturers brought in from other universities be such as to reduce to a minimum the necessity for waiving the twice-in-four-year rule.

That the number of courses of instruction, undergraduate and graduate, be increased as the demand warrants and as funds permit.

That the University make provision for as balanced courses in the Summer Session as are provided in the Winter Session.

That the policy of giving such courses as Music Appreciation, Art Appreciation, Library Work, Physical Education and Guidance, and for which credit is given by the Department of Education towards the Academic Certificate, be continued.

That refresher courses covering certain subjects required for Senior Matriculation be given, but without credit.

a three-year curriculum be drawn up

a three-year time-table be drawn up.

That courses be staggered in such a way as to remove all inducement to choose courses on any ground other than that of academic considerations.

That the present schedule of remuneration for outside lecturers and payment for their travelling expenses be continued.

That the budget for the Summer Session be prepared on the same basis as the budget for a Faculty or for a Department.

That the Director of the Summer Session and the Director of the Department of University Extension confer respecting all non-University credit courses offered at the University in the summer.

That the Board of Governors rescind the regulation which requires that the Summer Session be self-sustaining.

#### Waiving of Regulations Governing Limitation of Attendance:

In view of the fact that the limits of effective accommodation had long since been far exceeded; that there was no immediate prospect of obtaining greater accommodation; that the enrolment was increasing rapidly; that there was no increase in the legislative grant for 1938-39, and that there had been an appreciable lowering of the academic standards in many departments during the past few years, the Board of Governors, as stated in the Report of the President for the academic year ended August 31st, 1938, passed the following regulation which was published in the Calendar for 1938-39:

"Resolved, That, beginning with the session 1938-39, the number of First Year students in the Faculty of Arts and Science and the Faculty of Agriculture be limited to 450; in the Second Year of the Course in Applied Science to 120; in the Second Year of the Course in Nursing and Health to 20; and in the Teacher Training Course to 60".

In September, 1938, the Government requested the Board of Governors not to give effect to this regulation for the current session; and the Board, relying "upon the Government to provide the additional accommodation which will be necessary as the result of the action requested", resolved that limitation of enrolment be not enforced for the academic year 1938-39.

As a result of this action, the general situation in regard to accommodation was worse this year in many respects than ever before. To the greater congestion in the upper years was added the further fact that the registration in First Year Agriculture was thirty per cent. higher than it was in the preceding year. The Dean of the Faculty of Agriculture reported that, as a result of the increased enrolment, "efficient laboratory instruction is impossible and consequently lecture-demonstrations will have to be the rule in the class this year".

The difficulties in the situation were met by the Board of Governors, in a measure, by special grants for equipment, supplies and temporary alterations in buildings. The number of student assistants, although already much too great, relatively, was considerably increased; and, by beginning lectures at 8:30 o'clock instead of 9:00, and by reducing the noon period by one-half hour, the time table committee was enabled to provide an extra lecture period per day.

The difficulties which arise from lack of accommodation, as has been stated frequently, cannot be solved by minor adjustments: they are much too fundamental for such easy solution. They can be resolved only by limitation of registration or by greatly increased lecture room and laboratory space involving heavy capital expenditure.

Respectfully submitted,

LEONARD S. KLINCK,  
President.

Vancouver, B.C.,  
August 23rd, 1940

REPORT OF THE REGISTRARRegistration

<u>Faculty of Arts and Science</u>	<u>Women</u>	<u>Men</u>	<u>Total</u>	
First Year.....	165	301	466	
Second Year.....	155	231	386	
Third Year.....	121	195	316	
Fourth Year.....	115	167	282	
Graduates.....	29	102	131	
Social Service.....	47	6	53	
Teacher Training Course.....	39	18	57	
Directed Reading Courses.....	30	127	157	
Extra-Sessional Classes.....	19	48	67	
Double Registrations.....	-17	-39	-56	1859

Faculty of Applied Science

Second Year.....	-	136	136	
Third Year.....	-	112	112	
Fourth Year.....	-	79	79	
Fifth Year.....	-	78	78	
Graduates.....	-	14	14	
			<u>419</u>	

Faculty of Applied Science (Nursing)

Second Year.....	18	-	18	
Third Year.....	12	-	12	
Fourth Year.....	9	-	9	
Fifth Year.....	12	-	12	
Sixth Year.....	8	-	8	
Public Health Nursing.....	16	-	16	
			<u>75</u>	494

Faculty of Agriculture

First Year.....	3	32	35	
Second Year.....	4	25	29	
Third Year.....	4	9	13	
Fourth Year.....	2	21	23	
Graduates.....	2	15	17	
Occupational Course.....	-	6	6	123

TOTAL

2476 ✓

	<u>Women</u>	<u>Men</u>	<u>Total</u>
Evening Class in Botany.....	11	33	44
Summer Session (1939).....	223	471	694
(Faculty of Arts and Science)			

Nationalities of Students (exclusive of those taking the Teacher Training Course, Extra-Sessional Classes, Directed Reading Courses and Public Health Nursing Course):

British 1969; American 44; Japanese 52; Chinese 20; Jewish 21;		
Swedish 14; Italian 10; French 4; Norwegian 7; Russian 10;		
Greek 7; others 71.	-	<u>TOTAL</u> - <u>2229</u>

Geographical Distribution of Students:

From Vancouver and vicinity.....	1434
From Victoria.....	115
From New Westminster.....	124
From other Provincial points.....	700
From other Provinces.....	80
From other countries.....	<u>23</u>
	<u>TOTAL</u> <u>2476</u>

Occupations of Parents (exclusive of those taking the Teacher Training Course, Extra-Sessional Classes, Directed Reading Courses and Public Health Nursing Course):

The following occupations were most largely represented:-

Accountant 47; Agent 38; Banker 24; Barrister 16; Broker 38;  
 Business Man 19; Carpenter 26; Civil Service 20; Clergy 38; Clerk 40;  
 Contractor 38; Dealer 18; Dentist 16; Doctor 72; Engineer 123;  
 Farmer 83; Inspector 20; Insurance 26; Lawyer 36; Lumberman 25;  
 Manager 39; Merchant 105; Miner 15; Professor 15; R.R.Employee 49;  
 Salesman 53; Teacher 54; Wholesaler 18.

Location of Graduates:

Number in,-

Vancouver.....	2318
Other parts of British Columbia.....	1338
Other parts of Canada.....	321
British Isles.....	47
Other parts of British Empire.....	6
United States of America.....	242
Other countries.....	71
Number deceased.....	92
Number whose address is unknown.....	<u>519</u>
	<u>TOTAL</u> <u>4954</u>

Comparative Statement of Attendance  
Sessions 1931-32 to 1938-39

**NB**

Session	Arts and Science	Applied Science	Nursing	Agri- culture	Teacher Training Course	Total Winter Session	Summer Session	Short Courses	Grand Total
1931-32	1477	284	44	75	109	1989	441	342	2772
1932-33	1269	288	47	71	64	1739	404	181	2324
1933-34	1147	287	48	63	61	1606	370	124	2100
1934-35	1238	320	57	71	66	1652	377	165	2294
1935-36	1337	336	68	80	62	1883	464	278	2625
1936-37	1499	366	47	95	42	2049	566	306	2921
1937-38	1590	416	50	100	67	2223	650	278	3151
1938-39	1634	419	59	117	57	2286	659	290	3235

Comparative Statement of Degrees Conferred  
Sessions 1931-32 to 1938-39

Year	M.A.	B.A.	B.Com.	M.A.Sc.	B.A.Sc.	B.A.Sc. Nursing	M.S.A.	B.S.A.	Total	Grand Total
1931	20	211	14	2	39	7	2	13	308	2500
1932	4	31	1	-	5	-	-	-	41	2541
	17	201	15	2	37	4	9	6	291	2832
1933	6	36	1	-	6	-	-	-	49	2881
	19	215	22	8	44	7	4	12	331	3212
1934	4	46	5	3	5	-	-	1	64	3276
	11	204	31	3	37	5	4	12	307	3583
1935	6	36	5	1	5	-	1	3	57	3640
	14	196	23	8	57	13	2	19	332	3972
1936	12	45	5	-	5	-	-	1	68	4040
	15	175	21	6	50	7	5	16	296	4335
1937	10	38	1	2	3	-	3	2	59	4394
	21	190	28	4	48	2	7	14	314	4708
1938	9	54	8	-	6	1	1	1	80	4788
	20	204	31	6	56	7	3	19	346	5134
1939	10	53	3	2	4	-	-	5	77	5211
	19	217	22	7	71	8	4	22	370	5581

Comparative Statement of Diplomas Issued  
Sessions 1931-32 to 1938-39

Year	Teacher Training	Public Health Nursing	Social Service	Occupational Course in Agriculture	TOTALS
1931	58	11	-	3	72
1932	85 12	8 1	2 11	7 -	102 24
1933	58 -	13 1	4 5	- -	75 6
1934	61 3	10 -	- 3	- -	71 6
1935	65 1	15 -	3 7	3 -	86 8
1936	60 -	15 -	- 12	- -	75 12
1937	39 1	16 5	- 19	4 -	59 25
1938	65 -	18 2	1 15	3 -	87 17
1939	54	14	2	4	74

# Scholarships, Fellowships and Bursaries Awarded to Graduates

During the year many scholarships, fellowships and bursaries have been won by graduates of the University. The following list does not include awards which have been made in The University of British Columbia.

Name	Award	Value	Subject	Where Tenable
Barss, Walter M.	Teaching Fellowship	\$700	Physics	Purdue University
Beattie, Roderick N.	Graduate Fellowship	\$500	Forestry	Univ. of Toronto
Burnett, Daniel A.	First Student Prize (Timber Bridge Design Contest of the American Forest Products Industries, National Lumber Manufacturers' Assoc. & Timber Engineering Co. of Washington, D.C.)	\$200	-	(Open to students of all Universities in United States and Canada)
Christie, Robert F.	Teaching Fellowship	\$650	Physics	Univ. of California
Clayton, Henry H.	Teaching Fellowship	\$800	Physics	Purdue University
Cook, Francis	Teaching Fellowship	\$600	Chemistry	Univ. of Toronto
Danielson, Gordon C.	Teaching Fellowship	\$800	Physics	Purdue University
Davenport, Charles H.	Fellowship	\$1,100	Chemistry	Mass. Inst. of Technology
Davies, George F.	Standard Oil Scholarship	\$850	Chemistry	Univ. of Oregon
Davis, Jack	Rhodes Scholarship (3 yrs. at £400 a yr)		Chemistry	Oxford University
Eastham, Arthur	Teaching Fellowship	\$600	Chemistry	Cellulose Research Laboratories, McGill
English, William N.	Teaching Fellowship	\$650	Physics	Univ. of California
Fisher, John H.	National Research Council Scholarship	\$750	Chemistry	Cellulose Research Laboratories, McGill
Ford, Sherwood D.	Student Prize (Timber Bridge Design Contest of the American Forest Products Industries, National Lumber Manufacturers' Assoc. & Timber Engineering Co. of Washington, D.C.)	\$ 10	-	(Open to students of all Universities in United States and Canada)
Ford, William L.	Scholarship	\$600	Chemistry	Northwestern Univ.
Godard, Hugh	Scholarship	\$600	Chemistry	Cellulose Research Laboratories, McGill
Guthrie, Andrew	Teaching Fellowship	\$800	Physics	Purdue University
Henderson, Mary	Florence Nightingale Memorial	1,250	Public Health Nursing	Normally tenable at Bel- ford College, Univ. of London. Owing to present emergency, made tenable at the Univ. of Toronto School of Nursing.
Kilpatrick, Heather	Rockefeller Foundation	\$2,500	Public Health Nursing	Univ. of Toronto, with pro- vision for subsequent travel to other centres (for special postgraduate work).

Name	Award	Value	Subject	Where Tenable
King, Robert H.	Scholarship	\$400	Chemistry of Animal Nutrition	Macdonald College, McGill
Kusaka, Shuichi	Teaching Fellowship	\$650	Physics	Univ. of California
Lovell, Edwin	National Research Council Studentship	\$750	Chemistry	Cellulose Research Laboratories, McGill
McKenzie, Kenneth R.	Research Fellowship	\$800	Physics	Univ. of California
McMahon, Howard O.	Fellowship	\$1,200	Chemistry	Mass. Inst. of Technology
Macaulay, Archibald M.	Graduate Scholarship	\$200	History & International Relations	Clark University
Perkins, Maurice F.	Scholarship	\$540	Economics	Iowa State College
Retallack, J. Gordon	Teaching Fellowship	\$650	Physics	Univ. of California
Robertson, Struan	Teaching Fellowship	\$975	Statistics	Univ. of California
Shipton, Bernard	Scholarship	\$600	Chemistry	Northwestern University
Smith, Ronald N.	Teaching Fellowship	\$800	Physics	Purdue University
Thomson, James W.	Scholarship	\$300	Economics	Columbia University
Volkoff, George M.	Royal Society of Canada Fellowship	\$1,500	Physics	University of California
Volpe, Paul A.	Graduate Scholarship	-	Economics	Univ. of Washington
Watson, Kenneth DeP.	Research Fellowship	\$1,600	Geology	Princeton University
West, Kenneth A.	Teaching Fellowship	\$600	Chemistry	Cellulose Research Laboratories, McGill
White, William H.	Assistantship	\$250	Geology	Univ. of Toronto
Wilson, Beverly	Kellogg Foundation Fellowship	\$1,500	Public Health Nursing	Kellogg Foundation, Michigan
Wright, Frances M.	Scholarship	\$600	Chemistry	Stanford University

NOTE: In many cases these scholarships and fellowships carry with them free tuition or exemption from fees in addition to their monetary value.

Value of scholarships, fellowships, and bursaries won by our graduates in other Universities and in Institutes in 1939.....\$33,707.00

Total value of scholarships, fellowships, and bursaries won by our graduates in other Universities and in Institutes since the first awards were made in 1917.....\$636,069.00.

Respectfully submitted,

STANLEY W. MATHEWS,  
Registrar.

REPORT OF THE DEAN OF THE FACULTY  
OF ARTS AND SCIENCE

18.

Accommodation.

While no increased accommodation had been provided, there was considerable relief in classroom and laboratory congestion by altering the time table so as to begin lectures at 8:30 a.m. The noon period was cut from one and a half hours to one hour. These changes permit one extra lecture period during the mornings. The earlier time for starting undoubtedly works some hardship on students who live at home and who have a considerable distance to go to reach the University, but the same difficulties exist in several other universities and are perhaps even more acute when lectures begin at 8 a.m. The change provides the necessary additional class rooms for lectures but there is still some difficulty with certain of the laboratory work. Also there is insufficient office space in the Arts building.

Accreditation and Curriculum Revision.

Much time has been consumed in deliberation and debate upon the question of the Accreditation of the High Schools and the revision of the High School curriculum. A scheme for accrediting was finally worked out and after much discussion was first put into effect for a year and after some slight modification was adopted on a year by year basis.

The chief changes in the curriculum were in the sciences where an effort was made to lay a broader foundation in General Science with later specialization in the particular sciences. Special science courses were drawn up which follow the course in General Science and which provide extra training for those who wish to major in the sciences or take Applied Science at the University. These special science courses are available for Senior Matriculation for the non-science students but must be taken on University Entrance by the science students. More advanced special science courses are being drafted for those wishing to enter Second Year sciences at the University. It is expected that they will be available for the school year 1940-41. The committees in charge of these courses consist of High School teachers and of certain representatives from the science departments at the University. They have given a good deal of time and care to their work.

New Introductory Science courses (Chemistry A and Physics A) were drawn up for students entering the University with only General Science.

It is anticipated that the above changes in and integration of the science courses in the High School and University will provide a wider scientific knowledge for all the students and a better training for prospective science students.

Certain revision has also been made in the languages but the coordination here does not as yet seem to be as complete as in the sciences.

### Extra-Sessional Classes.

Below are listed the Extra-Sessional Classes together with the instructors and the registration.

<u>Class</u>	<u>Instructor</u>	<u>Registration</u>
History 2	Dr. W. N. Sage	39
Government 3	Dr. W. Ivor Jennings	30

Those in attendance were teachers in the vicinity of Greater Vancouver. Among them were several graduates who were taking work for the M.A. degree. There is always a high standard of achievement in these classes.

### Directed Reading Courses.

<u>Class</u>	<u>Instructor</u>	<u>Registration</u>
English 2	Professor T. Larsen	62
Philosophy 7	Professor C.B. Wood	95

The registration in these classes is pretty well distributed over the Province. Outside of Greater Vancouver, some of the places where students carried on this work were:

Campbell River, Carcross - Yukon, Chemainus, Chilliwack, Duncan, Fruitvale, Great Central Lake, Hope, Invermere, Mount Lehman, Nanaimo, Nelson, New Denver, New Westminster, Ocean Falls, Port Alice, Penticton, Kelowna, Vernon, Union Bay, Sointula, Victoria, Toronto, London - England.

This type of work was begun under Professor A. C. Cooke and the high standard of achievement then reached is being maintained.

There is difficulty each year in determining what classes should be given as Extra-Sessional Classes and what as Directed Reading Courses. An effort is being made to draw up a programme for these classes over a period of two years and relate them with the Summer Session schedules.

### Visiting Professor.

The University was fortunate in having the services of Dr. W. Ivor Jennings of the London School of Economics to take the work of Professor H. F. Angus who was still on leave of absence serving with the Royal Commission on Dominion-Provincial Relations. Dr. Jennings made a valuable contribution to the work of the University not only within the University but also by the character and number of his outside lectures throughout the Province.

### Resignation.

It is with a feeling of profound regret that I record the resignation of Ira Dilworth, Professor of English, who after nine months' leave of absence left to become the Regional Director of British Columbia for the Canadian Broadcasting Corporation. He came to us after a distinguished career - McGill and Harvard - and after spending some years in the secondary schools of the Province, also Victoria College and finally as Principal of Victoria High School. His charming personality and his rare gifts as an inspiring teacher of English and as a musician of high repute both as a conductor and as a lecturer on the appreciation of music, soon won for him a high place in University life. While we wish him every success in his present field for which of course he is eminently suited, we deplore the loss of one of our most beloved and inspiring professors.

### Researches.

I wish to make reference to the list of publications by various members of the Faculty. It is not possible to review all these publications but at this time (September, 1939) when the thoughts and the energies of the nation are centred on another gigantic world-conflict, it might not be deemed unprofitable to refer to the scientific investigations of the Faculty, and their bearing on the development of the natural resources and their contribution to national welfare. It will be conceded by all that even the finest contributions in the applied scientific fields have their bases in the researches in Pure Science. And this Faculty, which is a Faculty of Science as well as of Arts, has been able to make its researches in the fields of Pure Science and has been glad to know that these researches contribute in no small way to the problems of industry and welfare.

#### Department of Bacteriology and Preventive Medicine:

During the year, particularly during the summer of 1938, Dr. Dolman and his assistants carried on an extensive investigation into the cause of undulant fever in man. Their results aroused very considerable interest in many quarters.

During the year Dr. D. C. B. Duff continued his investigations on the cause of Furunculosis - a highly infectious disease attacking under hatching conditions several species of trout and also salmon. This marked the third year for these investigations carried on under an annual grant from the Fisheries Board of Canada. The disease was discovered in British Columbia by Dr. Duff about 1932 and since that time it has appeared in several widely separated areas in the Province, occurring in rivers, lakes and hatcheries. The worst example of its ravages in the Province was the outbreak at the Cowichan Lake Hatchery in 1938 when one half of all the hatchery fish perished as a result of the infection. A most serious possibility presented itself as a result of this outbreak since among the fish attacked were two species of the Pacific salmon. The consequence of the spread of this disease among fish which

form one of our greatest industries in this Province can hardly be overestimated. With a view to developing methods of combating the disease Dr. Duff had made careful studies of the nature of the causative bacillus and during the year under review found it possible to manufacture an inexpensive but effective vaccine which could be given to young hatchery fish in their food. After completing experiments on a small laboratory scale, Dr. Duff carried out large scale testing at a specially designed laboratory in the Provincial Fish Hatchery at Stanley Park. Results cannot yet be reported in full from these experiments. If the results of the large-scale experiments are comparable to those of the small-scale, a most potent weapon has been found for the control of Furunculosis in fish. This study has not only led to results of immediate practical value but has also been the means of important discoveries of a fundamental nature in the science of Bacteriology.

At a recent meeting of the Third International Congress for Microbiology, Dr. Duff upon the invitation of the Executive of the Congress reported on his investigations. These will later be embodied in an article requested for the official Journal of the Society of American Bacteriologists.

#### Department of Botany:

In Genetics, research in Alfalfa was conducted under the joint cooperation of Dr. Hutchinson and Dr. Moe with Miss Helen Farley, M.S.A. as assistant. The valuable hybrids developed by Professors Boving and Moe can be established as commercial strains only after seed-producing, true-breeding lines have been established, except possibly by the limited use of cuttings. The selection and use of these lines have at their bases a knowledge of the cytological life history, particularly studies of the rate of pollen tube growth and the complexity of chromosome complements.

In Plant Pathology, Dr. Frank Dickson and students investigated a new fungus attacking turnips stored at low temperatures, a parasite on the valuable garden shrub Daphne, and several wood destroying fungi.

In Taxonomy, Professor John Davidson and his son carried on valuable research on the identification of loco-weed, one of the most harmful and elusive of range plants.

In Physiology, Dr. John Allardyce and students conducted basic medical research on the function of ductless glands, particularly the thymus, the effect of thymus extract on growth and development, and the importance of radiation of specific wave lengths.

#### Department of Chemistry:

Some of the results of the many investigations which have been undertaken in the Department of Chemistry during the year are described briefly below.

The pigments of British Columbia pilchard oil have been separated by chromatographic analysis and identified by their absorption spectra and other physical properties. The amount of pigmentation is, however, no indication of the vitamin content, since most of the coloration is due to a pigment which is unrelated to Vitamin A.

The various methods of estimating nicotinic acid have been evaluated by many analyses. Compounds which interfere with the procedure have been ascertained and better methods of carrying out the analysis have been found. This investigation has an added importance since nicotinic acid has been discovered to be the pellagra preventive Vitamin.

The iodine and phosphorus content of salmon, pilchard, herring, dog-fish liver and cat-fish liver oils have been determined. The iodine content is important to the manufacturer of poultry feeds, while the phosphorus compounds play a part in the emulsification of fish oils and as antioxidants.

Various plant hormones have been found to be activators for live yeast but have little accelerating effect on the enzyme, zymase.

Work has been continued on the activation of charcoal of the type used in gas masks. This work has been in progress for many years. Very recently a variety of charcoal was produced here which was so active that it could reduce carbon dioxide to carbon monoxide at room temperature. Ordinary active charcoal cannot do this. The mechanism of this superactivation is being studied and a very promising theory is being tested at the present time.

Some work on the capacity of laboratory distilling columns was carried on and a relationship was obtained between the capacity of the column and the nature of the liquid being distilled. This relationship is of value in the design of laboratory columns. This year the distillation equipment is being expanded to handle work on the separation of water from glycerol, of great importance in connection with munition supplies.

Corrosion tests were made on metals electroplated with "Oxoseal", a patented alloy owned by the Dominion Rust Proofing Company. The corrosive resistance of metals electroplated with this alloy have been tested in sodium chloride, sodium carbonate and sulphate solutions. Tests show that this alloy is superior to either cadmium or zinc or alloys of these two metals. The practical uses of this alloy are very extensive, to mention only one, the covering of ordinary nails.

Measurements have been carried on now for two years on Douglas Fir piling to determine the rate of leaching of copper, zinc and arsenic compounds. Pileings have been treated with these salts to preserve them from the action of various bacteria. A table has been prepared by means of which it is

possible to calculate the amount of the various salts which have to be impregnated into Douglas Fir piling to give it a life of 5, 10, 20 years. Creosoting is an excellent preservative but the treatment is considerably more expensive.

Various hydrocarbons have been synthesized in the laboratories, as well as isolated from petroleum. Exact measurements of their physical properties have been made. This special training has been of great value in placing men in the petroleum industry.

In the search for a more satisfactory preservative for fishing nets considerable advances have been made. It has been found that the kind of plasticizer has a most marked effect upon preserving qualities of the chlorinated rubber. Further investigation is being continued. The wearing ability of the net, the thickness of the preservatives, the slipping of knots are being investigated, as well as many other factors.

A study has been made of the reduction of native B.C. ores by means of natural gases from Medicine Hat, and by local coal gas. Quantitative reduction of haematite has been effected and excellent results obtained from various sulphide ores. A new volumetric method for the determination of cerium in acid solution by means of potassium permanganate has been developed.

Cerium oxide has been shown to be an effective catalyst in the oxidation of sulphur dioxide to sulphur trioxide for the manufacturing of sulphuric acid.

The work on Coccidiosis is now well under way. Confirmatory measurements have shown that manure has a preventive effect, and possibly curative effect upon this disease.

In continuation of the study of the flotation of galena it was shown that natural lead sulphide due to oxidation carries a coating of lead sulphate. This may be removed more or less completely by treatment with ammonium acetate, the flotation response being proportional to the vigor of the treatment with the cleaning agent. The result would indicate that pure galena shows inherent flotability in the absence of any collector. It was also shown that the cleaner the surface of the particles, the smaller the quantity of collector used up in cleaning the surface by double decomposition with the products of oxidation.

#### Department of Geology and Geography:

The academic year under review marked the completion of the report on the geological survey of the Colony of HongKong and the adjoining Leased Territories. It was begun on the invitation of the Colonial Government of Hong Kong who after consultation with the Geological Surveys of Great Britain, Australia and India and upon the advice of the British authorities invited Dean R. W. Brock, Head of the Department of Geology to undertake the work.

"On his return from the Geological Congress held in Australia in 1922, Dean Brock initiated the survey by spending a short time in Hong Kong and adjoining territory. Dr. S. J. Schofield went to Hong Kong in the autumn of 1923 and spent six months on field work. Dr. M. Y. Williams spent six months in the colony in 1924-25, Dr. W. L. Uglow in 1925-26 and Dean Brock in 1926-27.

Dr. Schofield did reconnaissance work over the whole territory and prepared a preliminary classification of the rocks. Dr. Williams covered the sedimentary rocks of the region and established the ages of the fossiliferous beds. Dr. Uglow worked on the large island of Lan Tau and the adjoining mainland. His untimely death resulting from an accident suffered at Honolulu on his way home, left his colleagues without his assistance in the preparation of maps and report and the finished products of their united efforts are the poorer for his passing.

Dean Brock, assisted by his son Britton Brock, studied and mapped the igneous rocks of the mainland and Hong Kong Island and restudied Lan Tau Island sufficiently to interpret Dr. Uglow's work. He also revised the sedimentary rocks in the light of accumulating evidence.

The work done during the period recorded was plotted on an old topographical map, pending the production of a new map which was in preparation by the British Ordinance Office. This map was published in 1928 and proved so entirely different from the former map, that it was impossible to replot the geology without another season in the field. Consequently, Dean Brock, assisted by E. J. Lees, returned to Hong Kong and spent six months in the field in 1932-33.

On his return, Dean Brock and Dr. Williams completed the geological map (July, 1934) which was printed by the Ordinance Survey Office, Southampton, in 1936, on the scale of three-quarter inch to one mile.

Meantime Dean Brock and Dr. Williams had been working on the report. Dr. T. C. Phemister (then Associate Professor of Mineralogy and Petrology at this University) made analyses of several of the rock types of Hong Kong, and worked on the petrography. Financed by a liberal grant from the Geological Society of America, under the Penrose bequest, the Department of Geology of the University of Minnesota analysed various rock specimens.

Dr. H. Reis of Cornell University reported on numerous clay samples, and the late S. S. Buckman of Thame, England, reported on the ammonites collected by Dr. Williams.

The report was progressing rapidly when Dean Brock passed so tragically from the scene of his many activities in the summer of 1935.

Thereafter Dr. Schofield took over the task of completing the unfinished chapters. Dr. Williams prepared and edited the work, and on March 29th, 1939, the volume with some 100 photographic illustrations was mailed to the Colonial Secretary of Hong Kong. "

Cooperating with the Department of Mining and Metallurgy, the Department continued to make use of the super-panner, infra-sizer, the high grade mineralography apparatus and assay facilities in gold research. Some thirteen important projects were completed by Dr. H. V. Warren and his assistants besides various smaller investigations. The Mining Companies with which the Departments have been in contact have expressed complete satisfaction with the results obtained. In fact their expression took concrete form in two scholarships to the University.

Dr. M. Y. Williams completed his report on the work he had done on the geology of the Peace River area for the Provincial Government; Dr. Swanson made investigations in the Gold Fields area of Lake Athabaska for the Consolidated Mining and Smelting Co.; and Dr. Davis had charge of geology in the Provincial Summer School for Prospectors.

#### Department of Physics:

Much of the research work carried on in the Department of Physics during the past year has been of value to the industries of the Province. Typical of these investigations are the following:

(a) the determination of the vitamin content of fish oils by absorption spectrophotometry. This work has been carried on in cooperation with the Fisheries Experimental Station at Prince Rupert;

(b) the development of spectrochemical analysis both for controlling the composition of alloys in metallurgy and for detecting small traces of elements which are known to be of great importance in Agriculture and other industries;

(c) work undertaken in cooperation with the Department of Chemical Engineering on the structure of organic molecules. For this work the Raman effect and polarimetric methods have been used;

(d) work in micro-polarimetry to establish the presence of nucleo-proteins in bacteriological cultures;

(e) Geophysical methods of locating ore bodies - particularly prospecting for radium bearing minerals;

(f) much routine standarization is undertaken, e.g. the optical pyrometers, barometers, X-ray dosimeters, etc.

Department of Zoology:

In the field of Zoology, Dr. McLean Fraser completed certain volumes on the classification and distribution of Hydroids, particularly in Pacific waters. This is a valuable contribution to the fishing industry as it has been found that halibut and other commercial fishes are most prevalent where hydroids abound.

Professor G. J. Spencer continued with his control experiments and observations on the prevalence of locusts over different parts of the Province particularly in the Nicola Ranges where tremendous outbreaks occurred. His special report on the outbreak in these ranges was very flatteringly received by the chief of the Field Crops Division, Ottawa. It is gratifying to report that the simple bait formula which he worked out a decade ago has been largely adopted on all over-grazed or dry ranges and farm lands in Canada and under similar conditions by the enormous control organizations in the United States.

Conclusion.

The Dean wishes to express his appreciation of the wholehearted way in which the members of the Faculty carried on their work, sometimes under great difficulties.

Respectfully submitted,

D. BUCHANAN,  
Dean.

REPORT OF THE DEAN OF THE FACULTY  
OF APPLIED SCIENCE

In my two previous reports I mentioned the principal changes that had been made in the curricula of the departments in this faculty. During the session, for which I now have the honour to report, only minor adjustments were made. It is too early to essay an appraisal of results although several departmental heads, in the reports which they have submitted, express favourable opinions. A faculty committee is studying the curriculum of the Department of Chemical Engineering, and suggestions have been made which may lead to a similar review of the course in Mining and Metallurgy.

Some relief has been obtained from the congestion in the laboratories reported last year. A locker room in the Mining Building was converted into an assaying laboratory, and mezzanine floors were added to the hydraulic laboratory. Some additional equipment was obtained during the year. Notwithstanding these additions, many of the laboratories have been taxed to capacity.

As noted elsewhere large classes were enrolled during the year. There was a marked increase in the attendance in the classes of Forestry and Mechanical Engineering. I am pleased to report that graduates from all departments were successful in obtaining satisfactory employment. The demand for our graduates continues in increasing measure. There is also an increasing demand for the services of undergraduates during the long vacation.

Important researches have been carried on in nearly all departments. Additional space and equipment are urgently needed for this important branch of Applied Science. There is a definite increase in the number of applications for graduate work which several departments are unable to provide. If real progress is to be maintained, the spirit of scientific enquiry must be encouraged.

It is a pleasure to thank the members of the governing bodies, the staff and the student body for many courtesies extended to me during a very successful session.

Respectfully submitted,

JOHN N. FINLAYSON,

Dean

REPORT OF THE DEAN OF THE  
FACULTY OF AGRICULTURE

The 1938-39 academic year did not differ in any marked respect from previous years. The work of the Faculty was carried out as per Calendar and budget.

The total student registration of all grades was 123. This is 23 more than the class-rooms and laboratories were built to accommodate. The increase in total enrolment was largely in the First Year, where more than the usual number of students was found with Junior Matriculation standing rather than Senior Matriculation on entrance. It is consequently to be expected that some additional problems will be manifested in the upper years at later dates.

All departments have expressed appreciation of the provision made for student laboratory assistants.

Progress has been made in the following researches which, though University projects, are administered by the Dean of the Faculty of Agriculture.

- (a) British Columbia Fish Oils as Sources of Vitamins A. and D.
- (b) Fowl Paralysis.
- (c) Causes of Raspberry Failure
- (d) Activators for Enzymes.
- (e) Surface Taint in Butter

Statements in detail with regard to these researches are to be found in the departmental reports.

The experiment in alfalfa being carried out in co-operation with the Dominion Experimental Farms was continued and gives promise of being highly successful. The elite and pure seed project in co-operation with the Provincial Department of Agriculture was expanded somewhat and is now a recognized addition to the policy of the Department of Agronomy. The Department of Agronomy examined approximately 200 soil samples sent in by farmers. These were unsolicited. A Field Day, to which were invited leading farmers and business men interested in pure seeds, was held by the Department of Agronomy. The day was very successful, and was attended by the Honourable the Minister of Agriculture for British Columbia.

In the Inter-collegiate Senior Dairy Cattle Judging Competition at Portland, the team from the University of British Columbia won the grand aggregate award for judging all breeds, and placed first in Guernseys and Holsteins, second in Jerseys and Ayrshires. Feeding trials were conducted with beef cattle, in co-operation with the

Agricultural Marketing Bureau (Vancouver) and the Provincial Department of Agriculture. The dairy herd continued free from tuberculosis. The herd was also tested monthly for contagious abortion, and important progress was made in the control of this disease. The herd was inoculated against haemorrhagic septicemia.

Blood testing work for the detection and elimination of pullorum disease in poultry was carried on by the Department of Animal Husbandry at the University, under the direction of Dr. J. G. Jervis. As arranged by the Dominion Department of Agriculture, R.O.P. birds to the number of 72,047 were tested and 1,162 reactors detected, constituting 1.62 per cent. Under the Provincial Department of Agriculture policy for flock approval, 87,562 birds were tested and 1,906 reactors detected, constituting 1.92 per cent. A total of 159,609 birds, with 3,068 reactors was tested during the period September 8th to December 30th. During January an additional 2,820 birds were bled and tested, with 101 reactors, or 3.58 per cent. These were new flocks not previously tested.

The Department of Dairying has been able to render important laboratory assistance to a large cheese factory that was having considerable trouble with the quality of its products.

The vegetable seed trials, in co-operation with the Dominion Department of Agriculture, were continued satisfactorily, and in addition similar trials were made with seeds provided by the Agricultural Marketing Bureau. A private grant of \$500.00 was received for this purpose. The work of Dr. G. H. Harris, on plant nutrition studies, has been pushed vigorously, and gives promise of being of outstanding practical value. Dr. Harris attended the meetings of the American Association for the Advancement of Science (Plant Physiology Section), held at Stanford University, California, June 30, 1939.

The new research poultry house was completed during the year. This was built with insurance monies received after the old fowl paralysis house was destroyed by fire. This makes a distinct addition to the equipment of the Department of Poultry Husbandry. A new laboratory in the old Incubator Building was made available and adequately equipped for student work in the department. Progress was made with the projects of breeding for meat production and improvement of the Cambars. Professor E. A. Lloyd and Mr. Jacob Biely attended the World's Poultry Congress at Cleveland, Ohio, in July, 1939.

I wish particularly to call your attention to the many details in the extended departmental reports.

Respectfully submitted,

F. M. CLEMENT,  
Dean.

REPORT OF THE DEAN OF WOMEN

During the year ending August 31st, 1939, the work among the women students was carried on to a large extent as in previous years.

One of the developments of special value was the increasing interest in University matters on the part of women graduates. The Phrateres organization has now an active Alumnae Club. This organization, as described in an earlier report, aims to get into membership the unsocial and the socially inexperienced girls, affording them the finer features of the Sorority system without the less desirable, and to bring them together under conditions which will remove the handicap caused in the case of otherwise excellent students by inhibitions growing out of timidity, supersensitiveness, lack of money and other causes and to prepare them the better to confront the experiences they will meet after leaving college. In several ways the graduate group has been very helpful to the undergraduate women in this organization.

The Sororities also have their Alumnae Associations and these various groups with the experience of life which a few years out of college brings to them, assist the undergraduates in their endeavour to bring about the best possible conditions. This fact is probably one of the reasons for the excellent spirit prevailing among the women students and their willingness to experiment in their organizations with changes which may make them of greater value to their members. Panhellenic, for example, introduced during the past year a new plan for the selection of sorority members which aims to do away with the former system of "rushing" and "bidding". This is an entirely independent venture on the part of the sororities of our own University and is being watched with great interest by the national fraternity officers. The new system will be tried for a second year and will then be thoroughly reviewed. It is hoped that much time, money, and nervous energy may be saved on the part of the members, and that much of the anxiety on the part of the aspirants for membership, which formerly detracted from the value of the opening weeks of the College year, will be avoided.

Among the undergraduate women there has been an increasing interest in Physical Education from the point of view of health and general physical fitness. Emphasis has been placed on the participation of a large number in the work of the gymnasium and in games, rather than on establishing records in League contests in which only a few women of outstanding ability in athletics can participate. Here, too, the influence of graduate organizations has been on the right side.

As in previous years, assistance was given a large number of women students in their choice of a vocation and in the selection of the courses leading to the vocation chosen. In the case of courses

not offered in our own university, information was given as to where the desired courses might be obtained. In a number of instances where deserving students were not eligible for University bursaries or loans, financial aid was given in the form of money, text-books or clothing, or positions were found in which money could be earned during the college year as well as in the winter and summer vacations. Advice was given regarding programmes and other matters connected with student organizations; and, on the invitation of the students, numerous meetings were addressed and dances and other functions, including a student camp, were attended. Supervision was made of the boarding houses of the approximately 180 out-of-town students, and other services rendered as the occasion demanded.

Respectfully submitted

MARY L. BOLLERT,

Dean of Women.

SUMMER SESSION

The twentieth Summer Session of The University of British Columbia opened on July 3rd, 1939 and closed on August 18th, 1939.

The enrolment for the session classified by college years follows; for purposes of comparison the corresponding figures for the three years preceding are given in parallel columns.

	<u>1939</u>	<u>1938</u>	<u>1937</u>	<u>1936</u>
Partial	11	5	18	19
First Year	65	74	89	118
Second Year	211	231	202	204
Third Year	100	80	74	66
Fourth Year	92	90	73	49
Graduates	209	179	183	110
Auditors	25	41		
	<u>713</u>	<u>700</u>	<u>639</u>	<u>566</u>

For purposes of comparison the students enrolled for Social Service have been omitted from the totals in 1938 and 1939. Perhaps a clearer view would be given by omitting the auditors and giving as totals 688, 659, 639, 566.

The staff consisted of 40 full-time instructors (as compared with 41 in 1938) and two part-time instructors (as compared with three in 1938). Of these two full-time instructors (Music and Guidance) and both the part-time instructors (Librarianship and Physical Education) were employed to give courses not for University credit but to meet the wishes of the Department of Education. As in previous years lecturers were brought in from all parts of Canada and the United States. What was said in the report for 1938 may very fitly be repeated: 'Several of them were not only of national but of international reputation'. The institutions whose staffs were drawn upon were: Acadia, Mount Allison, McGill, Queen's, Toronto, Saskatchewan, Alberta in the Dominion of Canada; Hawaii, Utah, Southern California, California at Los Angeles, Syracuse, and Reed. Besides these the Provincial Department of Education gave us instructors in Guidance, Librarianship and Physical Education. The course in Physical Education was given for the first time and I think very successfully by Mr. Lee of the Provincial Normal School.

The growth from year to year, rapid during the period of recovery, has become much slower in the last three years. From now on it may be expected to keep pace with the school and university population generally, to share the sufferings or the prosperity of the Province.

And now at the beginning of a period in which we shall do more than well if we maintain our present position, it may not be out of place to take stock of the positive gains of the last few years.

We have so developed the courses offered that it is now possible for Summer Session students to find fields of Major study in Chemistry, Physics, Botany and Mathematics, and in a lesser degree in French, that satisfy the requirements for the Bachelor's degree in Arts.

We have approximated a permanent curriculum with subjects given in a cycle of three years. Slight change will have to be made from year to year but not in greater measure than is found necessary in the Winter Session.

A permanent time table has been arrived at, under which students are able to arrange their courses for years ahead with an assurance not only that the courses desired will be given as planned but that their grouping in the time table will be unchanged.

The financial position of the Summer Session in 1939 has been much better than in the previous session, a result partially brought about by the increased enrolment, but mainly to be credited to the increase in fees. The conditions under which the budget for 1940 will be framed will call for some careful consideration.

I cannot find any new words to express my gratitude to the University, to my colleagues, and to the student body and its executive for constant and unfailing kindness.

Respectfully submitted,

LEMUEL ROBERTSON,

Director of Summer Session.

## REPORT OF THE DIRECTOR OF UNIVERSITY EXTENSION

### Introduction.

The third year of the University Extension Department's work has proved to be an important and progressive period. Reports covering the past twelve months indicate that increases have been made both in the amount and in the scope of the work undertaken and that the response given by the public to all Extension programmes has been even more enthusiastic and wide-spread than in the two previous years.

The extent and value of the work carried on by this Department may be better appreciated if it is pointed out that during the past year 2265 individuals registered for Extension courses or services. This number exceeds the total undergraduate registration at the University. In the period covered by this report, the Department conducted 179 study groups, 41 short courses, 12 evening classes and 158 Extension Lectures as well as many field days, exhibitions and demonstrations. The total attendance at these programmes exceeded 50,000. This figure does not include those persons attending the presentation of theatre and motion picture programmes or listening to radio broadcasts sponsored by the Department. If these are included it is estimated that over 75,000 persons have been helped by this Department to find a means of self-development and to take an intelligent interest in the world in which they live.

For the students of this Department, all the work of registration and the collection of fees is handled through the Extension Office. When it is realized that during the past year this one item has involved keeping the records of 2265 students, the inadequacy of the present office accommodation becomes apparent.

Without making any conventional tributes to the zeal and tenacity of the assistants and office staff of the Department, it is only fair to record the fact that they have had to work much too hard. Very often they work overtime but invariably without complaint.

### Policy.

There have been few changes in the policy of the Department. Educational opportunities are offered to all sections of the Province, but the emphasis is placed on serving the districts outside the Greater Vancouver Area. By this means it is hoped to connect outlying districts of British Columbia with their Provincial University and to give to people otherwise out of touch a chance for advancement and for creative work. Many communities have shown an eagerness to take advantage of the services offered by the Department and have expressed their appreciation of the University's efforts to further their social and economic interests through adult education.

## Programme.

For the purposes of this report the work will be discussed under the following headings:

Evening Classes; Extension Lectures; Drama Division; Visual Instruction Service; Extension Library Service; Study Groups; Short Courses; Radio; Youth Training Schools.

### Evening Classes.

The Evening Class instruction is confined almost exclusively to the Greater Vancouver Area. Evening courses held in Mission and Victoria will be included in other sections of the report. Classes were held at the University, in the Vancouver Normal School and at the Labour Temple. The registration at the classes showed a considerable increase in attendances and except for the three courses given for the Workers' Educational Association they were financially self-supporting.

The registered attendance at the classes was as follows:

English Composition 60;	English Literature 72;	Playwriting 17;
General Botany 39;	Amateur Gardening 50;	Poultry Husbandry 43;
Elementary Economics 26;	Trade Unionism (1) 43;	Trade Unionism
(2) 30	-	<u>TOTAL 381</u>

The courses in Elementary Economics and Trade Unionism were arranged for the Workers' Educational Association. The number registering for these courses is a sufficient indication of the working man's interest in further self-development through continuing his education.

### Extension Lectures.

Extension Lectures are the oldest Extension activity of the University. Many years before a Department was formed the University had organized a programme of popular lectures under the University Extension Committee.

During the past year a bulletin was prepared listing 64 lecturers and 298 subjects. These subjects were chosen for their topical interest and their educational value. The ever increasing interest in social and political problems, in international affairs and in current events made it difficult to provide enough lecturers for these fields. However, it has been pleasing to note an increasing demand for other subjects, particularly the arts and crafts.

The following comparative summary shows that although fewer lectures were given, the average and total attendances were considerably higher:

<u>Comparative Summary</u>	<u>1937-38</u>	<u>1938-39</u>
Number of lectures	190	158
Average Attendance	65	97
Total Attendance	12,831	15,352

In addition to the lectures arranged directly by the Department and listed here, members of the University staff have reported 328 lectures with a total attendance of 35,049.

### Drama Division.

The work in this Division has expanded very rapidly during the past year.

### Summer School of the Theatre.

The Summer School of the Theatre was inaugurated in 1938 under the distinguished direction of Miss Ellen Van Volkenburg. This year Mr. and Mrs. Burton James were appointed guest directors. The course lasted five weeks, from July 10th to August 12th.

Twenty full-time and 18 partial students registered for the course. Although this registration was considerably below last year's, it was more satisfactory from the point of view of efficient training.

In order to avoid interference with the instruction, no public performances were given this year. At the conclusion of the school a number of one-act plays, including one written by the students, were presented to interested spectators at a Studio Evening.

Believing that the students would benefit from seeing and assisting with a professional performance, the Department invited the Seattle Repertory Players to bring to the University their production of "Our Town". The invitation was accepted and the play was enacted for enthusiastic audiences on July 18th and 19th.

As part of the Summer School of the Theatre, an exhibition of Theatre Costumes was held. Costumes were shown by the Vancouver School of Art, the Vancouver Little Theatre, the Masquers' Club, the University Players' Club, and the Summer School of the Theatre. Miss Beatrice Lennie, Vancouver sculptress, loaned her theatrical masks.

### Short Courses.

During the year, three-day courses in Dramatics were held at Abbotsford, Ashcroft, Courtenay, Creston, Grand Forks, Invermere, Kimberley, Summerland and Vernon. These courses were conducted by Miss Somerset and proved to be very valuable to small dramatic groups interested in the amateur production of plays.

### The University Drama School of the Air.

During February and March, five programmes each of forty-five minutes duration were presented over the Canadian Broadcasting Corporation's national network. The specific problems of production were discussed both before and after a professional performance of the play.

Eighty Listening Groups registered with the Department for the series. They received copies of plays and outlines pertinent to the discussions.

(d) Playwriting Course.

Included in the Evening Classes was a course on Playwriting given by Professor F. G. C. Wood. During this course, several plays were written. Three of these are being rehearsed and are to be given as a Laboratory Theatre presentation in the University auditorium in September.

(e) Play Library.

With the library donated last year by the University Players' Club as a nucleus, a collection of approximately 1,500 plays has been assembled. This library is now being used by more than fifty registered groups. Twenty of these were provided with a continuous service of suitable dramatic works while the others received parcels of selected plays upon request.

It is gratifying to note that the work of the Department in this field is receiving recognition. Recently the Dramatists Play Service of New York donated to the Play Library a collection of 114 plays.

During the year 851 plays were loaned.

Visual Instruction Service.

During the past year, a large amount of photographic work, including the making of over 500 lantern slides, has been done for departments within the University.

One of the most interesting and valuable films taken during the year was a 16 mm. record in natural colour of the Royal Tour through the University area and a much longer natural colour film, now in production, is entitled "Some Phases of Horticulture".

Records indicate that over 10,000 persons attended showings of sound and silent educational films arranged and presented by the Department. A large number of these programmes were given at the Youth Training Schools.

The Dominion Government Motion Picture Bureau has designated the University as regional repository for the distribution in British Columbia of all Dominion Government films. This has made it possible to establish a film library to serve both school and adult groups.

With the steadily increasing interest in the use of motion pictures in education and the closer appreciation of the film as an art form, it was deemed advisable to inaugurate a short course in Cinematography at the University. For this purpose the Department secured Dr. Boris V. Morkovin, Head of the Department of Cinematography at the University of Southern California, to present a two weeks' course on: "Films and the School"; "Fundamentals of Motion Picture Production"; and "Development of Motion Pictures as Art, Technique,

Socio-Psychological Factor". The Vancouver Branch of the National Film Society offered valuable co-operation in providing illustrative films.

Keen appreciation and interest were displayed by more than fifty students who registered. In fact, so many members of the class expressed the desire to continue their studies along the lines developed by Dr. Morkovin that, as a result, the British Columbia Institute of Cinematography was formed.

The expansion of the work in this field is clearly indicated by the following statistics on the circulation of slides, films and equipment.

#### Circulation Statistics.

	<u>1937-38</u>	<u>1938-39</u>
Lantern Slides (sets)	93	140
Film Slides (sets)	43	568
Projectors	47	129
Films (reels)	-	296.

#### Extension Library Service.

Through the Extension Library it is planned to build up a collection of books on subjects closely related to the work of the Department and to make this collection available to all individuals and organizations within the Province.

Knowledge of the work of this Department is becoming more widely diffused and, as a consequence, a marked increase in circulation has been shown. Additions have been made to the book stock, especially in the field of modern fiction, and the collection as a whole is becoming well-rounded.

At present, excluding plays, there are 953 books in the Library. Of these 174 have been purchased during the past year. During the year 1,435 books were loaned.

#### Study Groups.

Group discussion enables individuals to clarify their ideas, to formulate their conclusions, to give direction to their thinking and, thereby, to increase their knowledge. There is no other activity in which there are greater opportunities for the University to give leadership. Within its limited resources the Department of University Extension is giving every encouragement to the formation of Study Groups.

During the year courses were offered in the following subjects:

British Columbia History; Practical Psychology; Modern Literature; History of the Theatre; Economics and Public Affairs; Co-operatives.

The Dominion Department of Fisheries has made a grant of \$5,000.00 to the University for the organization of a Study Group

programme among B.C. Fishermen. It is planned to offer courses on co-operatives and credit unions.

### Short Courses (Miscellaneous)

#### (a) Homemaking Courses.

In response to a request from the South Vancouver Island District Women's Institutes, a short course in Homemaking was held at Victoria from June 13th to 16th. Instruction was given in Handicrafts, Home Economics, Psychology and co-operatives. Thirty-four persons registered for the day classes and an average of seventy-five attended the evening meetings.

As a result of many requests from Women's Institute members, the Minister of Agriculture granted the Extension Department \$500.00 for short itinerant courses in Homemaking. Although the Department was unable to cope with the large number of applications received, courses were given at Cloverdale, Agassiz, Winfield, Keremeos, Okanagan Falls, Revelstoke, Vernon, Fawn and Yale.

In further co-operation with the Dominion and Provincial Departments of Agriculture an instructor in Home Economics was provided for field days at Armstrong, Pemberton, Duncan and Alberni.

#### (b) Hand-Weaving.

A revival of handicrafts has been marked in this Province during the last few years and great interest was aroused when the University Extension Department sponsored two courses in Hand-weaving during the summer at Vancouver and at Victoria.

Mrs. Mary Atwater, foremost exponent in America of hand-weaving, was engaged as instructor and, largely due to her efforts, both courses were very successful.

#### (c) Public Administration.

Professor W. Ivor Jennings gave a series of lectures on Public Administration at the Parliament Buildings, Victoria. The course was designed especially for civil servants and great appreciation was expressed regarding it.

### Art Appreciation.

Following the successful experiment of a year ago, a series of afternoon classes in Art Appreciation was given at the University by Mr. C. H. Scott.

The Department assisted an Art Study Club in Kamloops by providing a three-day course on Art Appreciation. The course was given by Mr. J. L. Shadbolt.

(e) Co-operatives.

Following the receipt of requests from representatives of the three largest fishing co-operatives in the Province, a three-day course on co-operatives was arranged for fishermen. The Dominion Department of Fisheries provided the funds which made it possible to bring the Rev. J. D. Nelson MacDonald from St. Francis Xavier University to conduct the course. Eighty-eight persons registered for the day classes and many times this number attended the evening lectures.

Radio.

Generous co-operation has been received from the Canadian Broadcasting Corporation. This organization installed new equipment in the University radio studio and arranged special lines connecting the Vancouver station with the University.

Although it was difficult to find suitable times for educational broadcasts, 148 broadcasts of recorded music from the Carnegie Music Set were given under the supervision of Professor Ira Dilworth. One of the most successful programmes was the "U.B.C. Drama Workshop" presented under the direction of the Drama Division.

Dominion-Provincial Youth Training Schools.

Working under a grant from the Dominion-Provincial Youth Training Plan and in co-operation with the Provincial Departments of Agriculture, Education and Labour, the Department has had a unique opportunity to conduct an experiment in Rural Adult Education.

Using the Danish and Scandinavian Folk Schools as models, the programme was designed to help young people understand the possibilities and advantages of rural life. Although the schools were primarily of an occupational character, much attention was given to training in recreational activities.

With the co-operation of Farmers' and Women's Institutes, District Agriculturists and local committees, dormitory schools of two weeks' duration were held in sixteen widely-scattered centres throughout the Province. The courses offered were modified to suit the needs of the various localities. They included instruction in Weaving, Cooking, Dress-making, Animal Husbandry, Dairying, Soils, Field Crops, Carpentry, Blacksmithing, Music Appreciation and Practical Psychology.

According to the terms of the grant only young people between the ages of 16 and 35 were eligible for the day classes. Within these age limits 1059 persons attended the schools for the full two weeks. At least twice this number attended special classes or participated in the evening programmes.

Although the work carried on during this first year was of an experimental nature, no activity of the Department has ever met with such unanimous approval. The Federal and Provincial Departments

responsible for the financial support of the programme have expressed their satisfaction by authorizing for the coming year, a grant of \$40,000.00 for this work.

### Public Relations.

The Department has made an effort to supply the local daily press, as well as the weekly newspapers of the Province, with news items concerning the work of the various departments of the University. Examination results were sent by wire to any newspaper desiring the service.

Photographs and exhibits from the University have been sent to various fairs and other exhibitions both in the Province and in other parts of Canada.

Many bulletins covering various activities of the Department have been prepared and distributed to a selected mailing list. The preparation of this mailing list has entailed a heavy burden of work. It contains over 7,000 names classified as to interest and locality.

### Miscellaneous.

There are many activities of the Department of University Extension which cannot be included in a brief annual report. Many of these will be found in the Interim Reports which have been submitted to the President's Office.

Numerous organizations carrying on educational work have received assistance from the University through some form of Extension service. Among these are included the Alumni Association, the Vancouver Symphony Society, the Y.W.C.A. and Y.M.C.A., the Vancouver Institute, the Vancouver Folk Festival Society, the Parent-Teacher Federation, the Community of Self-Help Association, the National Council of Education, the Women's and Farmers' Institutes and several others.

### Acknowledgments.

Reference has already been made to the degree of co-operation received from the staff of the Department. Many others have contributed to whatever success has been achieved. Among these, the contribution of the President of the University has been the most outstanding. During the past two years not only has he consistently given the Director wise counsel and encouragement, but he has also given him a great measure of freedom to develop and expand the work of the Department. His support has been invaluable.

The members of the Board of Governors, by their generous financial support and their expressions of appreciation and encouragement, have also helped to further the programme of the Department. And finally, many members of the teaching staff of the University have given unstintingly of their time and energy to the work of University Extension.

Respectfully submitted,

GORDON M. SHRUM,  
Director of University Extension.

REPORT OF THE DIRECTOR OF THE UNIVERSITY  
HEALTH SERVICE

42.

We have the honour to present the twelfth annual report of the Health Service of the University of British Columbia.

It is with considerable pleasure that we are able to report that progress has been made in the work of this Department, furthering, and in some cases fulfilling, our objective.

Dr. K. F. Brandon, Director of the University Health Service for the past two and one-half years, left in March to take up duties in the United States. He was held in high esteem by the students, for he had their trust and friendship. This fact made it very easy for the students to come to him with their problems and requests for advice on matters of health. He will be missed.

As the registration of new students was less than in 1937-38, which was unusually large, the number of medical examinations was reduced. With the assistance of physicians and nurses of the Metropolitan Health Committee, the majority of first year examinations were completed by the end of October, 1938.

Throughout the session 742 students were given complete physical examinations, including 671 new students and 71 students who had not received examinations for periods up to four years. Of the number examined, 54.5 per cent. required follow-up for defects or further investigation. Again the response to the notes sent to these students was gratifying, 71 per cent. reporting. One hundred defective conditions were reported as treated by the private physician or dentist, and others fully realized the importance of having defects corrected but were unable to have these done under present financial status.

Unfortunately, some of the students' time is still lost through sickness, although this year the number of absentees has been considerably reduced. One hundred and eighty-four students lost 1266 school days and in addition three students found to have tuberculosis were unable to continue.

The out-patient service has also increased, 58 per cent. of the students, exclusive of those given physical examination, reporting to the office at some time during the year. The number of visits was 6,015 as against 4,782 for the previous year. Of these, 1014 were for First Aid Treatment, an increase of over 40 per cent.

This year it was possible to enlarge the anti-tuberculosis programme. In the 1937-38 session, only a certain number of the students entering the University were given the tuberculin test. This fall, however, each student who had not previously been tested received the test at the time of the medical examinations. The results of these tests are enlightening. Last year, with the selected group, 70 per cent. showed positive reactions to the test, while this year there were 43 per cent. positive among the larger and much more representative group. This percentage is still a little higher than

that of the survey of eleven colleges throughout the United States, which was 30.5 per cent. positive. It was noticed in the survey that the Universities on both the Atlantic and Pacific Coasts showed a higher percentage of positive reactors than the Universities situated inland. Our findings conform to the American figures in this respect. From the larger group of students which was X-rayed this year, only four cases of pulmonary tuberculosis were found, two minimal, of which one was healed; one moderately advanced and another far advanced. The three active cases were picked up early and were not allowed to continue at the University.

Referring again to the tuberculin test, it was observed that 39 per cent. of students under twenty and 51 per cent. of those over twenty years of age were positive. Variations according to sex were insignificant. As was expected, urban rates were higher than rural, 45 per cent. of students from urban areas showing positive, while the rural figure was 33 per cent.

The incidence of communicable diseases was very low during the session. The incidence of the so-called major communicable diseases was negligible and the bulk of the diseases was confined to the respiratory system. The department takes no credit for this low incidence as with the exception of vaccinations against smallpox which numbered 115, only 6 students were immunized against scarlet fever and 10 against diphtheria. Table VIII (tables are not included in the President's report) presents the number of potentially susceptible individuals against certain of the communicable diseases, as determined by the history of absence of disease and in the cases of diphtheria and scarlet fever, the absence also of previous immunization. Although it is unfair to state that 92 per cent. of the student body might conceivably contract diphtheria or 86 per cent. scarlet fever, yet these figures serve to illustrate the danger from these diseases should epidemics of either occur. The response to the widespread use of diphtheria toxoid which began in Vancouver about ten years ago, directed mainly in protecting the younger age groups, is reflected in the lower level of susceptibles to diphtheria as found among the freshman class. It is to be hoped that steadily diminishing percentages of susceptibles will be found in the years to come. It is gratifying to note that 80 per cent. of the student body are protected against smallpox.

During the course of routine physical examinations and consultations, many psychiatric problems are apparent. The difficulties, especially of adolescents and young adults, to adjust themselves to new responsibilities and environment presents a situation which, up to the present, we have been able to do little about. Psychoneurotic tendencies and mental aberrations present themselves constantly and too often the square peg in the round hole is left to continue. Preventive measures in this field are essential.

Fortunately there is promise of aid in this connection. This spring, Dr. C. H. Gundry joined the staff of the Metropolitan Health Committee as Director of Mental Hygiene and it is proposed that part of his services be utilized next year in laying the foundations of a mental hygiene programme.

In February of the year a "Health Week" was held on the campus by the Monro Pre-Medical Club with the assistance of this Department. Lectures were given by specialists in their fields on three of the outstanding health problems of the present day. Moving pictures on general subjects of health were also shown, and the whole was received with enthusiasm by the student body.

There has also been considerable interest amongst the students regarding first aid, and Miss Upshall conducted two series of lectures on this subject. They were eagerly received.

Another fact which makes us believe the students are becoming more health conscious is the growing demand for literature and references on health.

The work for this year has also been greatly facilitated by the fact that we have been able to have a full-time clerk for the session.

Sanitary conditions were surveyed during the year and a special visit was made by a Sanitary Inspector of the Metropolitan Health Committee regarding the Cafeteria.

Following customary procedure, all members of the Cafeteria Staff were medically examined and instructed on matters and methods of health in their responsibility as food handlers.

With increasing numbers of students availing themselves of the health services, on occasion the quarters provided have been taxed to capacity. It is our hope that extra room will be provided so that the work may be more conveniently carried on.

The opportunity is taken to acknowledge the splendid spirit of co-operation which the President, Deans and members of the faculties have evidenced during the year in aiding the work of this Department. It is only with a spirit of mutual understanding regarding the needs of the student body that progress can be assured.

As this Department is interested in the health education of the students, we are pleased to have the opportunity of representation on the advisory board of the Committee of Health and Physical Education of Arts and Science. It is to be hoped that the students will benefit by a more extended health educational programme in the future.

We are also indebted to the Laboratories of the Provincial Department of Health for their assistance and advice concerning tests undertaken, and to the Division of Tuberculosis Control, Provincial Department of Health, for diagnostic facilities and reports in connection with the tuberculosis survey.

To the physicians and nurses of the Metropolitan Health Committee whose able assistance permitted the completion of examinations of First Year students at an early date, we extend our hearty thanks.

Respectfully submitted,

J. S. KITCHING,  
Director,  
University Health Service.

REPORT OF THE INSTRUCTOR IN PHYSICAL  
EDUCATION FOR MEN

45

The registration for classes in Physical Education during the 1938-39 session totalled 285. Although the class work was entirely voluntary, these classes were well attended.

The programme available to these men included boxing, basketball, volleyball, tumbling, apparatus, badminton, wrestling, and some corrective work.

With only the lunch hour available for intramural activities, the programme was extremely limited. The following data indicates the results for the session 1938-39:

Classes competing.....	10
Number of sports.....	12
Number of contests.....	67
Total participation.....	730
Different individuals.....	375

With the extensive inter-city and inter-collegiate sport programme carried on by the students, approximately sixty-six per cent. of the men enrolled at the University were actively engaged in some form of physical education.

During the past year every effort has been made to encourage one hundred per cent. participation in Physical Education by the men students. With increased facilities, it is anticipated that enough equipment and space will be provided to broaden the programme in such a way that every man will be anxious to take part.

It is hoped that the programme available to undergraduate students can be organized in such a way that it will be feasible for all those students planning to proceed to Teacher Training to have an opportunity to take physical education and that it will appear as a permanent record in their teaching qualifications. Arrangements have been made for the session 1939-40 to include an additional hour of physical education each week for those taking Teacher Training who are particularly interested in teaching Health and Physical Education.

Respectfully submitted,

M.L. VAN VLIET,  
Instructor in Physical Education  
for Men.

REPORT OF THE INSTRUCTOR IN PHYSICAL  
EDUCATION FOR WOMEN

Women's registration in Physical Education activities was approximately 450. Attendance in all classes was very satisfactory with continued interest throughout the session.

The programme included classes in Gymnastics and Tumbling, Dancing and Rhythms, Badminton, Archery and Volley ball, also talks on various phases of Physical Education which included lectures on posture, body mechanics and principles of health.

Intramurals were conducted throughout the session. In the fall term these consisted of Volley ball, Basketball and Archery, and in the winter term of Badminton and mixed teams in Volley ball. Tournaments were also arranged between Phrateres Chapters and Sororities

Intercollegiate competition was carried out by means of a Telegraphic Archery Tournament with ten Canadian colleges and universities competing. The University of British Columbia won second place.

A course in Recreational Leadership was given which included lectures on recreation, leadership and recreational activities. The work also included material in dancing and games suitable for use in schools, playgrounds and clubs. It may be of interest to mention here that all vacancies on the city playgrounds last summer were filled by women who had taken the course in Recreational Leadership at the University.

A class in Dancing and Rhythms was given to the women in this year's Education class with one hundred per cent. attendance.

The Instructor in Physical Education for Women assisted in:-

1. The organization and supervision of mixed Badminton periods in the Gymnasium.
2. The organization of a Women's Athletic Directorate for the purpose of giving greater co-operation and control in women's sports within the University.
3. The giving of co-operation and counsel in all sports clubs of the Women's Athletic Association.
4. The establishment of an improved system of awards by means of a point system in women's athletics.
5. The bringing to the attention of women students books which are now available in the Library on various phases of physical education, recreational activities and sports.

6. The giving of lectures on group work in recreation to the Social Service class.
7. The charting of women students for posture: the giving of counsel in matters of healthful living: leadership in matters concerning professional standards and opportunities in physical education and recreation.

Respectfully submitted,

GERTRUDE E. MOORE,  
Instructor in Physical  
Education for Women.

REPORT OF THE OFFICER COMMANDING  
CANADIAN OFFICERS' TRAINING CORPS  
UNIVERSITY OF BRITISH COLUMBIA CONTINGENT.

1. INTRODUCTION.

During the year 1937-38 the University of British Columbia Contingent of the Canadian Officers' Training Corps established an outstanding record of achievement in examination work, shooting and general efficiency. Therefore, it is particularly gratifying to note that during the session 1938-39 the same standard has been maintained. Since no University credit is given for work in the Corps, the U.B.C. Contingent, in point of numbers, is one of the smaller units in Canada. However the deficiency in numbers is amply compensated by the enthusiasm and efficiency of the personnel.

The Contingent's rifle team again brought honour to the University by winning second place in the Inter-University Rifle Competition, held in November, 1938. Thus, during three consecutive years, the Contingent has won this competition twice and ranked second once. This is a record unequalled by any other university in Canada.

In the War Office examinations the members of the Corps again acquitted themselves with great distinction. Cadet Wilson, R.A. ranked second among Canadian Candidates writing for Certificate "A" (Lieutenant's Examination), and Corporal Goodwin, W. H. claimed third place in the same examination. In Certificate "B" (Captain's Examination), Sergeant Barton, W.H. ranked second in Canada. Members of the Corps thus won three of the six prizes awarded by the Infantry and Machine Gun Association on the basis of the War Office examinations.

It is hoped that the alterations which have been made in the rooms occupied by the Corps in the basement of the Arts Building will make possible the carrying on of the work of the Unit under more favourable conditions.

2. TRAINING.

(a) Fall Term.

The parades were held on Tuesday nights at The Seaforth Armouries.

The training of "A" and "B" Certificate Candidates was carried out during regular parades and also on allotted noon periods and other stated times during the week at the University.

(b) Christmas Vacation.

During the Christmas vacation a party consisting of 52 all ranks engaged in training at Work Point Barracks, Victoria,

B.C. This period lasted from December 26th to December 31st, 1939.

The course was under the general supervision of Permanent Force Officers and Assistant Instructors.

(c) Spring Term.

The training of "A" and "B" Candidates was carried out during evening parades and during the week as in the Fall Term.

3. EXAMINATION RESULTS.

(a) War Office Examinations.

(i) Certificate "A"

Twenty-five candidates wrote this examination and twenty-two passed. Both the number writing and passing were the largest in the history of the Corps.

(ii) Certificate "B"

Twelve candidates wrote this examination and nine passed.

(b) Canadian Small Arms School.

During August two officers attended the Canadian Small Arms School at Camp Sarcee, Alta., and were successful in passing the examinations.

(c) School of Signals.

One member of the Contingent was successful in passing examinations at Barriefield, Ont., completing Wireless Telegraphy.

4. RESULTS OF RIFLE COMPETITIONS.

(a) Annual Inter-University Rifle Competition.

Sergt. H.A.Mann was awarded the Leckie Shield as the member making the highest score in this competition.

The standing of Universities competing follows:

The three highest

McMaster University.....	793
University of British Columbia.....	754
Royal Military College.....	706

Members of the Contingent carried out the prescribed practices laid down for classification in Rifle and Light Machine Gun (L.M.G.) on Blair Rifle Range, North Vancouver, B.C., during the Fall and part of the Spring of 1939.

The MacInnes Shield for the highest score in classification (Rifle) was awarded to Lieut. F. B. Jones for a total score of 96/115.

5. TRAINING SPECIAL.

Light Machine Gun (Lewis)

During the past year more emphasis has been placed on the L.M.G. training. Many members became proficient in the use of this weapon on the Open Range. The results were very gratifying.

(b) Anti-gas Training.

In spite of the shortage of respirators, lack of facilities and equipment, a large number of members in the Contingent were instructed in the use of the respirator and were passed through the Gas Chamber. Also, all candidates for certificates were examined in Types of War Gases, Decontamination, Protective Equipment and the care of the respirator.

(c) Vickers Machine Gun.

A class was started dealing with the use of this weapon, one certificate member being trained in its use for the War Office Examinations. Unfortunately the equipment did not reach the unit in time to practice on the Open Range. More work will be carried out with this arm next season.

Judging Distance

A judging distance test was carried out at the University after a limited amount of time had been spent on the subject. The results although not outstanding were quite satisfactory in view of the time spent on this phase of the training. Seventy-five all ranks participated in this training.

6. ANNUAL INSPECTION.

The Annual Inspection of the Contingent by the District Officer Commanding M.D. No. 11, Brigadier J.C. Stuart, D.S.O. and his staff took place on March 14th, 1939, at the Seaforth Armouries.

The total parade strength was as follows:

Officers and attached Officers	17
Other Ranks	<u>77</u>
Total All Ranks	<u>94</u>

The Inspecting Officer commented very favourably on the smartness of the men and on their ability in Drill, Small Arms Training and other branches of their work.

## 7. SOCIAL ACTIVITIES.

The 9th Annual Ball was held at the Spanish Grill, Hotel Vancouver, on March 21st, 1939. Members of the Military Committee, Officers of the Vancouver Garrison and others were guests of the Contingent on this occasion. This was the only social activity sponsored by the Unit.

## 8. GENERAL COMMENTS.

### Training

In many respects the past year has been the most satisfactory training period in the history of the Unit. The attendance at parades and rifle practices was exceptionally good. The Corps had a full complement of qualified officers and N.C.O's, many of whom have had specialized training. It was very gratifying to note the manner in which the student officers are assuming a greater share of the responsibility for the training of the recruits.

### Discipline

There were no breaches of discipline during the year.

### Ordnance Inspection.

The Ordnance Inspection was carried out by the District Ordnance Officer on May 12, 1939. No shortages were reported.

### Annual Audit

The Annual Audit of Regimental Funds was carried out on September 26th, 1938, by a Board appointed for the purpose. The books and accounts of the Contingent were found correct.

### Royal Visit by Their Majesties, May 29, 1939.

The Corps participated in the visit of Their Majesties by lining the Mall during the passage of the Royal Procession.

(f) Guard of Honour for His Excellency Right Honourable Lord Tweedsmuir, Governor-General of Canada, March 17, 1939.

The Corps provided a Guard of Honour for His Excellency Right Honourable Lord Tweedsmuir upon the occasion of his visit to the University to receive an honorary degree.

## 9. STATISTICAL REPORT

In order to show the steady progress of the Corps during the past few years a statistical report has been prepared (not included). During the past year there has been an increase in the average number attending parades, the number writing examinations and particularly in the number classified as First Class Shots.

### ALTERATIONS TO QUARTERS.

Since no suitable accommodation could be obtained in the Brock Memorial Building, and since there seemed to be no immediate possibility of getting space in any other building on the campus, it was decided to improve the present quarters under the Arts Building. At a cost of approximately \$500.00 the heating pipes throughout the whole basement of the Arts Building have been raised approximately eighteen inches. This greatly improves all the rooms and the rifle range. Arrangements have been made whereby the room used for the Book Exchange will be available to the Corps as soon as the Brock Memorial Building is completed. The armoury has been improved, and new rooms assigned for the Orderly Room and the Quartermaster's Stores. In addition new moth-proof cabinets have been built for the clothing. This will eventually effect a considerable saving by preventing damage to the clothing by moths and mice. These alterations will make the present quarters reasonably suitable for all the work of the corps except drilling.

### NOTE OF APPRECIATION BY THE COMMANDING OFFICER

It is again a great pleasure for the Commanding Officer to record his appreciation of the services of Q.M.S.I.--A.A.Smith, P.P.C. L.I.(I.C.). He has been with the Unit for the past nine years, and much of the success of the Contingent in Inter-University Competition and in the War Office Examinations is due to the high standard of the work carried on by this instructor.

The Commanding Officer wishes to record also his appreciation of the assistance and co-operation afforded him by the Chancellor, the President, the Board of Governors, the Committee on Military Education, the District Officer Commanding M.D. No. 11 and Staff, the Officer Commanding the Seaforth Highlanders of Canada, the Officer Commanding the 14th Infantry Brigade, and all others who have contributed to the success of the Contingent.

Respectfully submitted,

G. M. SHRUM,  
Lieut.-Colonel,  
Commanding U.B.C. Contingent, C.O.T.C.

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