REPORT OF THE PRESIDENT

OF THE UNIVERSITY OF BRITISH COLUMBIA

FOR THE ACADEMIC YEAR ENDED

AUGUST 31, 1942.

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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, 1942. Included in this report are the annual reports of the Deans of the Faculties and of certain of the other chief administrative officers of the University. A list of publications by members of the staff is also included.

I INTRODUCTION:

During the year under review the University's responsibilities were enlarged, the range of its activities extended, and the intensity of its application increased. To its normal peace-time functions there were added others directly or indirectly related to the war effort. The professorial staff was further reduced by the granting of leaves of absence, and the members who remained assumed still heavier duties. Certain curtailments in courses were necessitated by the needs of the hour, but these were of relatively minor importance compared with the addition of new courses and the modifications and expansions in established ones. Notwithstanding the heavy enlistment of young men who normally would have attended the University, registration reached the highest peak in the University's history. Only in the Summer Session was there a falling off in attendance. The professorial staff was called upon by many of the departments of the Dominion and Provincial Governments; by the Navy, the Army and the Air Force; by the National Research Council; by private research organizations and by Canadian industry. Unfinished theoretical researches were restricted or temporarily discontinued, and investigations of immediate practical application, such as those having to do with munitions, short-wave detection devices, the discovery and greater utilization of war minerals and the increased production of foodstuffs, were undertaken.

Earnestness and seriousness of purpose characterized the attitude of the students. This was evidenced in a closer application to their studies notwithstanding the prevailing uncertainty respecting enlistment at the opening of the term, the fuller schedule of hours resulting from compulsory military training and other inevitable distractions. The regulations governing the compulsory military training of all physically-fit male students were wisely administered by the Officer

Commanding the Canadian Officers' Training Corps. Only one student withdrew from the University because of conscientious objection to military training. The women students, feeling that more should be expected of them than the curriculum required, requested that some form of war work for women, which would be comparable at least in time-value to the military training for the men, be made compulsory for the next year.

Thus the tempo of every constituent part of the University was quickened in a conscious and sustained effort to contribute to the fullest possible extent towards the more efficient prosecution of the war.

II GENERAL:

Teaching Staff:

The numbers of members on the teaching staff for the academic year 1941-42, were as follows:

Deans of Faculties	3
Professors (exclusive of Professors on leave)	36
Associate Professors (exclusive of one Associate Professor on leave)	24
Assistant Professors (exclusive of Assistant Professors on leave)	27
Lecturers	11
Instructors	16
Honorary Lecturers	8
Part-time Lecturers	40
Assistants	88
TOTAL	253

New Appointments:

Miss Mary Dorothy Mawdsley, B.A.(McGill), M.A.(Brit.Col.), Ph.D.(Chicago), Dean of Women and Assistant Professor of English.
John Edward Liersch, B.A., B.A.Sc.(Brit.Col.), M.F.(Washington), Professor and Head of the Department of Forestry.
Joseph Gilbert Hooley, M.A.(Brit.Col.), Ph.D.(Mass.Inst. of Tech.), Assistant Professor of Chemistry.
Franklin Stewart Harris, B.A., M.A.(Brigham Young), Ph.D. (Cal.Inst. of Tech.), Lecturer in the Department of Physics.
Robert Eric Langton, M.A.(Brit.Col.), Lecturer in the Department of Physics.
Miss Ruth E. Fields, B.A.(Brit.Col.), Instructor in the Department of Biology and Botany.

Promotions:

O. J. Todd, Ph.D.(Harvard), from Professor to Professor and Head of the Department of Classics.
Maxwell A. Cameron, M.A.(Brit.Col.), Ph.D.(Toronto), from Associate Professor and Acting-Head to Professor and Acting-Head of the Department of Education.
Vernon C. Brink, M.S.A.(Brit.Col.), Ph.D.(Wisconsin), from Instructor to Assistant Professor in the Department of Agronomy.

Leaves of Absence:

Dr. George M. Weir, Professor and Head of the Department of Education, for the duration of the war.
Mr. Henry F. Angus, Professor and Head of the Department of Economics, Political Science and Sociology, for a period of one year as from September 1st, 1941.
Mr. J. E. Liersch, Professor and Head of the Department of Forestry, for a period of one year as from January 23rd, 1942.
Dr. Thomas G. Henderson, Associate Professor of Philosophy, for a period of one year as from July 1st, 1941.
Dr. Arthur M. Crooker, Assistant Professor of Physics, from April 1st, 1941 to August 31st, 1942.
Dr. Kenneth C. Mann, Assistant Professor of Physics, from October 1st, 1941 to August 31st, 1942.

Appointments Necessitated by Leaves of Absence:

William John Brockelbank, B.A.(Haverford College, Penn.), LL.B.(Harvard), Docteur en Droit (Paris), Lecturer in the Department of Economics, Political Science and Sociology during the absence of Professor H. F. Angus.

Alexander P. Maslow, A.M. (Michigan), Ph.D. (California), Lecturer in the Department of Philosophy and Psychology during the absence of Dr. Thomas G. Henderson.
Andrew McKellar, B.A. (Brit.Col.), Ph.D. (California), Lecturer in the Department of Physics during the absence of Dr. Kenneth C. Mann.

Retirement upon Superannuation:

Dr. Ebenezer Henry Archibald.

In the retirement of Dr. E. H. Archibald, Professor of Analytical Chemistry, the University lost the services of a productive scholar, an inspiring teacher and a much-loved member of the professorial staff whose life and work exerted a profound influence, not only within the Department of Chemistry, but throughout the entire University. For twenty-six years, many of which were years of adversity, Dr. Archibald served the University with a devotion to duty, a singleness of purpose, a buoyancy of spirit, and with such distinction as a scientist and a teacher as greatly to enhance the reputation of the University throughout Canada and the United States. Irrespective of faculty affiliations, the students who sat under him and the colleagues who served with him join in wishing Dr. Archibald many more years of happy, effective living.

Resignations:

David H. Russell, B.Sc., M.Ed. (Sask.), Ph.D. (Columbia), Associate Professor of Education.
Ronald Hilton, M.A. (Oxon.), Assistant Professor in the Department of Modern Languages.

Re-appointment Following Attainment of Retirement Age:

Dr. E. H. Archibald, Professor of Analytical Chemistry, who reached the age of retirement on October 1st, 1941, was re-appointed for a period of eight months.

Appointment of Emeritus Professor:

In the report covering the academic year 1940-41, reference was made to the retirement of Professor Lemuel Fergus Robertson, Professor and Head of the Department of Classics. In recognition of his long and distinguished services as a member of the staff, the Board of Governors, at the first meeting following Professor Robertson's retirement, appointed him Emeritus Professor of Classics.

Retirement of Dr. Evlyn Fenwick Farris as a Member of the Senate and of the Board of Governors:

During the year under review, Dr. Evlyn F. Farris retired as a member of the Senate and of the Board of Governors. A charter member of Convocation, Dr. Farris was in 1912 elected a member of the first Senate of the University and in 1917 was appointed to the Board of Governors. For thirty years she served with distinction as a member of the Senate or of the Board of Governors, and for a considerable part of this time she was a member of both bodies. As Honorary Secretary to the Board of Governors, she served for two extended periods with marked acceptance. Dr. Farris' record, while notable for length of service, was even more distinguished by reason of her high achievements, administrative as well as educational. In partial recognition of these services the Senate, at the Congregation held in May, 1942, conferred upon her the honorary degree of Doctor of Laws (honoris causa) and chose her as Congregation Speaker for the occasion. Upon her retirement the Senate and the Board of Governors expressed the wish that life for Dr. Farris would continue to be as full and rewarding to her as her long and devoted service had been to the University of British Columbia.

Retirement of Miss Annie Bruce Jamieson as a Member of the Senate and of the Board of Governors:

The year witnessed the retirement, from membership in the Senate and on the Board of Governors, of Miss Annie B. Jamieson, who for twenty-four years had been an elected member of the Senate, and for six years of this period had served as one of the three representatives of the Senate on the Board of Governors. In the performance of her duties in these capacities, Miss Jamieson, out of a rich and varied experience gained in many spheres of educational activity, was of great assistance in interpreting to the governing bodies of the University the practices and policies of the High Schools as these related to the courses of instruction given in the University. Because of her many services to the cause of higher education in the province the Senate, at the Congregation held in May, 1942, conferred upon Miss Jamieson the degree of Doctor of Laws (honoris causa).

Honorary Degrees Conferred:

At the twenty-seventh Congregation of the University of British Columbia which was held on May 14th, 1942, the honorary degree of Doctor of Laws (honoris causa) was conferred upon the following:

Evlyn Fenwick Farris, M.A., LL.D.
Charles McLean Fraser, M.A., Ph.D., F.R.S.C., Emeritus Professor of Zoology
Annie Bruce Jamieson, B.A.
Lemuel Fergus Robertson, M.A., Emeritus Professor of Classics.

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

In May, 1942, Dr. R. E. McKechnie was again chosen as Chancellor of the University for a term of three years. Dr. McKechnie was a charter member of Convocation and in 1912 became a member of the first Senate of the University. In 1918 he was elected Chancellor and for eight consecutive elections since that time he has been elected by acclamation for this the highest honour in the gift of Convocation. During the many years Dr. McKechnie has served as Chancellor, his interest in education has been vital and his influence on the policies of the University, administrative as well as academic, has been far-reaching. To his wisdom, his foresight, and his devotion to the cause of higher education the University will ever remain his debtor.

Obituary:

His Honour Judge John Donald Swanson.

In the death of Judge J. D. Swanson, who for more than eighteen years had served as an elected member of Senate, the University suffered a severe loss. A true friend to the University and a wise counsellor, Judge Swanson was a staunch advocate of making a University education available to every young man and woman of ability, application and character who has the ambition and the determination to profit by the advantages which such an education affords.

III THE YEAR WITHIN THE UNIVERSITY:

Regulations Governing Limitation of Attendance Waived:

As in previous sessions, the regulations governing the limitation of attendance, as passed by the Board of Governors on January 28th, 1938, were again waived. In view of the urgent need for both teachers and nurses, the regulations with respect to limitation of attendance in the Teacher Training Course and in Nursing and Health were also waived for the session 1942-43.

A further factor which influenced the Board of Governors in waiving the regulations respecting students in the Department of Nursing and Health was the assurance, given by the Vancouver General Hospital and other organizations responsible for the field work of student nurses, that ample facilities would be provided for this form of practical instruction.

Degree of Bachelor of Education Authorized:

During the year the Senate and the Board of Governors made provision for the extension of courses in Education leading to the degree of Bachelor of Education. The adoption of this policy, it was felt, would encourage teachers to improve their qualifications and thus raise the standards of education in the province. The creation of the new degree affords opportunity for professional study beyond the one year previously required of teachers-in-training and so anticipates the probability that this course will become compulsory for teachers desiring high academic and professional standing.

The course leading to the B.Ed. degree is less advanced than that prescribed for the M.A. degree, and is designed to meet the needs of those students who wish to pursue further study in Education without being under the necessity of submitting a thesis as is required of all candidates for the M.A. degree.

For students who take the Teacher Training Course, the new degree represents nearly two years of work beyond the B.A. degree. In addition to establishing suitable academic standards for this degree, successful teaching experience will also be required. An extended list of the courses prescribed for the B.Ed. degree was authorized by Senate for inclusion in the curriculum of the 1942 Summer Session.

Statement Respecting Scholarships and Bursaries Awarded:

The value of scholarships and Bursaries awarded during the year showed a substantial increase over that of any corresponding preceding period. The generous financial assistance given to students of serious purpose, intellectual capacity and proven financial need is indicative of the increasing recognition which is being shown to deserving students by the Dominion and Provincial Governments as well as by the University itself. The amounts of the funds made available, exclusive of loan funds, together with the sources from which these monies came, were as follows:

Administered by the University		$20,440.00
Announced by the University but awarded by other institutions	-	1,400.00
Available for students in the province but not administered wholly by the University	-	11,100.00
TOTAL - exclusive of loan funds	-	$32,940.00

The amount of $11,100.00 listed above was made available from the following sources and for the purposes indicated:

Dominion-Provincial Youth Training Bursaries	-	$5,100.00
Dominion-Provincial War Services Bursaries	-	6,000.00

In all, 269 students were assisted. The value of the assistance ranged from $25.00 to $600.00.

The Mary L. Bollert Loan Fund for Women Students:

In the report covering the academic year 1940-41, reference was made to the retirement of Miss Mary L. Bollert, the first Dean of Women in the University of British Columbia. To perpetuate the name of Dean Bollert, and in recognition of the splendid service she had rendered, a Committee had been appointed by the alumnae of the University to raise funds for the establishment of a suitable gift to the University. During the year under review the Committee attained its two-fold objective: a portrait of Dean Bollert was presented to the University and a loan fund to be known as the "Mary L. Bollert Loan Fund for Women Students" was established. The portrait was hung in the Brock Memorial Building and the amount of the loan fund, namely five hundred dollars, was invested in Victory Bonds and will revert to the fund at the conclusion of the war.

Educational Programme for British Columbia Fishermen:

The educational programme for British Columbia fishermen, as organized and administered by the Department of University Extension and financed by the Dominion Department of Fisheries, was continued for the third year. Although the grant by the Department of Fisheries was reduced during this period, the continued response on the part of the fishermen and the progress made were most gratifying. As the result of personal visits, the distribution of specially prepared printed matter dealing with local problems confronting the fishermen, and the assistance given in organizing study groups, co-operative associations and credit unions, the material results achieved and the greatly improved morale of the fishing population entitle this relatively new service to special mention.

Projects Under the Special Grant for Research:

Following the practice of previous years, research projects for the fiscal year 1942-43 were agreed upon by the President and the Deans of the Faculties. In general, the

grants for these investigations were voted for projects involving work in two or more faculties, rather than being made to individual departments or single faculties. The researches authorized are as follows:

Undulant Fever; Genetics of Economic Plants; Effect of Hormones and of Radiant Energy on Growth; Explosives; Wool from Grass; Preservation of Fishing Nets; B.C.Coal and Shale; Superactive Charcoal; Surface Reactions of Minerals in Flotation; Reduction of Native Ores; Strategic Metals; Wall-rock Investigations; Application of Raman Effect to Problems in Oil Industry; Parasites and Diseases of the Columbia Black-tailed Deer; Foods and Feeding of Trout in Hatcheries; Natural Foods of Trout; Clams and other Bivalves; Economic Position of the Pheasant in the Okanagan; Hydroids; Usefulness of Trade Tests in the Selection of Industrial Workers; Treatment of Arsenical and Sulphide Ores; Causes of Raspberry Failure; British Columbia Fish Oils; Activators for Enzymes; Surface Taint in Butter; Calfhood Vaccination; Problems Associated with Meat Quality; Vitamin B Complex; Cheese Ripening; Auto-sexing of Cambar and Redbar; and Influence of Iron on Hydrolysis of Protein by Actinomyces and Physiology of Rhizobia.

Report of the Library Committee:

The Thirteenth Report of the Library Committee to the Senate, covering the fiscal year April 1, 1941 to March 31, 1942, was issued as a separate in October, 1942. Copies of the report were circulated to the members of the Senate and of the Board of Governors. Among the many interesting subjects treated in this report, the following are deserving of special mention:

The number of accessioned books was in excess of 125,000 and was increasing at the rate of approximately 5,500 per annum. Owing to the exigencies of the war, fewer books were being purchased in Great Britain and more in the United States. The premium on United States funds, plus the Canadian Exchange Tax, increased the price of every book by twenty-one per cent. These charges seriously reduced the number of books that could be purchased.

During the year a new reserve-book system was inaugurated whereby students were allowed direct access to the reserve-book stacks; the loan of phonograph records to listening and study groups was extended to include loans to undergraduates; with respect to periodicals, a special effort was made to secure and complete long sets; through economies effected in binding, the usual number of volumes were bound notwithstanding the rising costs; a total of 63,633 cards were received from the Library of Congress Depository Catalogue; instruction in the use of the Library was given to a number of groups and the experiment with displays, which had proved so valuable in previous years, was expanded.

IV THE UNIVERSITY IN WARTIME:

Once again, at the opening of the session, the University surveyed its resources in staff, equipment and financial ability and directed their utilization towards the more immediate service of the nation in so far as this was not inconsistent with its obligation to the students. This policy of adjustment and adaptation the University will continue to follow so long as the national emergency exists.

Policy of the Government towards Undergraduates:

At the outbreak of hostilities, there was a pronounced lack of educated men who had been trained for technical, administrative and research responsibilities. With the progress of the war the need for such men became increasingly acute. Education, practical experience and maturity of judgment are necessary to produce men who can render the requisite skilled service with greatest effectiveness. Such training requires time. To accelerate certain of the professional courses would defeat the objective sought.

That the government recognized this fact and was shaping its policy accordingly became increasingly evident as the war progressed. First, it advised all students in scientific subjects to continue their university work until graduation. Next, it assisted science students to continue their university careers by ensuring that they would obtain gainful employment during the summer vacation in work that would bear directly upon the courses of study they were pursuing and thus advance their practical experience in professional work as rapidly as possible. In the same year, bursaries were made available for certain specified classes of students of high scholastic standing and proven financial need; and in 1942, by joint action of the Dominion and Provincial Governments, generous bursaries were provided for students who otherwise would not have been able to come to the University, but whose matriculation standing in all subjects averaged at least seventy per cent. These selected students were required to undertake, upon graduation, to place their training at the disposal of the Director of Selective Service, in industry, in the fighting services, or in research. The quota for the University of British Columbia under this grant might be as high as 55, of which approximately 25 per cent. of the students accepted might be women.

If, therefore, physically-fit undergraduate men students of military age were in any sense a privileged class, it was because, in the national interest, the government temporarily placed them in that category. As individuals, and as a class, they were quick to realize that the nation's interests were paramount, and that the interests of institutions and individuals were purely secondary.

Compulsory Military Training:

During the session, the maximum strength of the U.B.C. Contingent, C.O.T.C., was 1879, the highest in the history of the Unit. The actual training strength approximated 1500. Under the National Resources Mobilization Act, 462 students were called for training and received postponements on condition that their training with the C.O.T.C. was satisfactory. The course given was that prescribed by National Defence Headquarters. The erection of the Armoury, to which more extended reference is made elsewhere in this report, greatly facilitated the giving of instruction, theoretical and practical.

During the year 415 members left the Unit to go on active service. Of these, 43 joined the Navy, 173 the Army and 199 the Air Force.

Special Courses:

Course in Supervision in Public Health Nursing:

Under the University Department of Nursing and Health, with the assistance of certain members of the Metropolitan Health Committee of Greater Vancouver and of a visiting lecturer, a two weeks' course for Supervisors in Public Health Nursing was offered. The giving of this course, which was held in co-operation with the Registered Nurses' Association, and which was largely attended, illustrates but one of the ways in which the Department of Nursing and Health endeavours to meet the pressing demand for increasing the number and improving the qualifications of nurses in the province.

Air Training Plan for Universities:

The University of British Columbia participated in the Air Training Plan for Universities to but a very limited extent owing to the fact that the syllabus of the proposed course was not submitted to the University by the Deputy Minister for Air Service in time to justify the inauguration of the course in the 1941-42 session. Members of the staff of the University, however, gave instruction in several of the prescribed subjects. Although both of the negotiating parties were desirous of seeing an Air Training Corps established at the University, arrangements for the course were not completed during the period covered by this report.

Radio Technicians' Course:

At the request of the Department of National Defence for Air, the University continued to conduct classes in Radio Mechanics. In the comparative summary of results of the training given to Radio Technicians at the various universities and

colleges as prepared by the Chief of the Air Staff, it was gratifying to note that the University of British Columbia ranked second among the seventeen institutions listed as giving instruction in this subject.

Course in Chemical Warfare and Related Subjects for A.R.P.Wardens:

Under arrangements made through the Provincial Civil Protection Committee, a course in Chemical Warfare and related subjects for Air Raid Precautions Wardens was given at the University. The curriculum for this course was drawn up by Inspector S. F. Moodie, and the majority of the staff were appointed and paid by the Committee. Members of the professorial staff from the Departments of Chemistry, Physics and English assisted in the lectures and laboratory demonstrations.

Course in Personnel Administration:

For one week, in each of the months of July, August, September and October, the Department of University Extension conducted a course in Personnel Administration. This course, which was sponsored and approved by the Dominion Department of Labour, was planned for the purpose of enabling executives and members of their administrative staffs to study the principles governing administrative procedure and to receive practical instruction in dealing with questions of organization and management, with particular reference to those problems which had arisen in the recently-organized war industries. The maximum number of applicants who could be accepted, as determined by the Department of Labour, was quickly reached. The leading businesses and industries of the province were represented. The majority of the instructors were drawn from the United States and eastern Canada. In the opinion of those who attended, the course was timely and of great practical assistance to the executives and administrators of industry in the province.

The British Columbia War Metals Research Board:

As the result of a co-operative agreement between the Dominion Department of Mines and Resources, the Provincial Department of Mines, the Federal Controller of Metals, the Mining Association of British Columbia and the University, the British Columbia War Metals Research Board was organized. In the constitution of this Board, the practical experience, technical knowledge and research abilities of geologists, miners and metallurgists were fully utilized with the result that its formation was quickly justified by the higher percentage recovery of strategic metals now being mined in the province.

Air Raid Precautions

The importance of adequate and well-organized protection of life and property on the campus, while evident at all times, is particularly so since Japan entered the war. Here three thousand persons spend their working hours, and the value of the University buildings, equipment and underground services is in excess of three and one-half millions of dollars.

Precautions which were instituted in 1940-41 against possible air raids and gas attacks were very considerably increased. The use of floodlights was restricted, additional fire equipment was purchased, and an air raid warning siren was installed. First aid stations were established and furnished with the necessary equipment and supplies. The staff and students were organized, and detailed instructions were given as to procedure in case of an air raid alarm. The University records and the most valuable equipment were transferred to the more nearly bomb-proof buildings. One practice air raid alarm was held at which all buildings were evacuated in three minutes. Upon the completion of this practice, A.R.P. officials assured the Board of Governors that every reasonable precaution had been taken for the protection of life and property at the University.

Erection of the Armoury:

On November 22nd, 1941, His Honour, the Lieutenant-Governor of the Province, in the presence of a large and representative body of citizens, officially opened the new Armoury. The erection of this much-needed building was made possible by the public-spirited devotion of the officers and men of the U.B.C. Contingent, C.O.T.C., who, over a period of fourteen years, had waived their training allowances in order that they - or, in the great majority of cases, their successors - might have suitable quarters in which to receive military instruction.

To Lieut.-Col. G. M. Shrum, Officer Commanding, U.B.C. Contingent, C.O.T.C., the University is deeply indebted for the initiative, the resource and the untiring energy which he showed in connection with every detail in the conceiving, planning, supervision and erection of this building.

Commodious as the Armoury is, additional accommodation will be required next session if all the specialized forms of military training now being contemplated are to be adequately provided for in a common centre. Anticipating this development in military instruction, the Corps has already accumulated sufficient funds for the extension and further equipment of the present building as soon as priorities on construction materials can be obtained.

Personal and Corporate Attitude of Students:

The response of the undergraduates to the many calls that were made upon them was one of the gratifying features of university life during the year. Throughout the session nearly every student was engaged in some form of war work and, with few exceptions, cheerfully carried the many extra hours of work involved without detracting seriously from the time which should be devoted to studies. Intercollegiate sports were again discontinued, and social functions were simplified in nature and reduced in number. The fact that women students voluntarily requested that a measure of war service be made compulsory in their case, and that they be required to devote a certain amount of time each week to some form of national service, reflected the general attitude of the campus.

V CONCLUSION:

Clearly, the duty of the University at this time is to keep the torch of knowledge burning and to provide an expanding base of instruction to meet the requirements of the new situations in those fields where a shortage of university trained man-power is authoritatively announced. The University would fail, and fail miserably, were it, in this crucial time in the life of the country, to cease to discharge its fundamental peace-time responsibility of graduating men and women of high intellectual capacity and proven technical ability.

To meet the pressing needs of the constantly increasing number of regular students who enroll, buildings and equipment are more urgently required than ever before. This, however, is but one aspect of the problem of providing adequate accommodation. The influx of soldier-students who will return to resume their interrupted courses, even before demobilization becomes general, will shortly constitute a problem of the first magnitude. The present is not too soon for the University of British Columbia to formulate and begin to give effect to plans which will enable it to meet this unparalleled opportunity.

Respectfully submitted,

LEONARD S. KLINCK,

President.

Vancouver, British Columbia
June 23, 1943.

REPORT OF THE REGISTRAR

Registration

Faculty of Arts and Science	Women	Men	Total	
First Year	208	370	578	
Second Year	169	295	464	
Third Year	159	174	333	
Fourth Year	113	159	272	
Graduates	29	87	116	
Social Work	19	3	22	
Teacher Training Course	48	20	68	
Directed Reading Courses	27	99	126	
Double Registrations	- 8	-23	-31	1948
Faculty of Applied Science				
Second Year	---	184	184	
Third Year	1	97	98	
Fourth Year	---	102	102	
Fifth Year	---	91	91	
Graduates	---	13	13	488
Faculty of Applied Science (Nursing)				
Second Year	17	---	17	
Third Year	10	---	10	
Fourth Year	12	---	12	
Fifth Year	18	---	18	
Sixth Year	6	---	6	
Public Health Nursing	13	---	13	76
Faculty of Agriculture				
First Year	9	35	44	
Second Year	1	30	31	
Third Year	5	34	39	
Fourth Year	5	24	29	
Graduates	3	9	12	
Occupational Course	---	4	4	159
TOTAL				2671
Evening Class in Botany	20	30	50	
Summer Session (1942) (Faculty of Arts and Science)	130	190	320	

Nationalities of Students (exclusive of those taking the Teacher Training Course, Social Work, Directed Reading Courses and Public Health Nursing):

British 2093; American 54; Japanese 72; Swedish 22; Hebrew 20; Norwegian 15; Italian 10; Greek 9; Russian 9; Ukranian 8; others 161. TOTAL 2473

Geographical Distribution of Students:

From Vancouver and vicinity	1641
From Victoria	120
From New Westminster	121
From other Provincial points	673
From points in Canada outside British Columbia	102
From other Countries	14
TOTAL	2671

Occupations of Parents (exclusive of those taking the Teacher Training Course, Social Work, Directed Reading Courses and Public Health Nursing):

Accountant 48; Army 24; Banker and Bank Manager 24; Barrister (etc.) 44; Broker 17; Carpenter 31; Civil Servant 34; Clergyman 33; Clerk 37; Contractor 39; Dentist 18; Doctor 59; Druggist 16; Engineer 134; Farmer 73; Insurance 36; Lumberman 27; Machinist 15; Manager 60; Manufacturer 29; Merchant 89; Professor 19; Real Estate 16; Salesman 68; Superintendent 31; Teacher 48; others 1069. TOTAL 2473

Location of Graduates:

Number in,-	
Vancouver	2705
Other parts of British Columbia	1680
Other parts of Canada	517
British Isles	46
United States of America	271
Other Countries	65
Number deceased	134
Number whose address is unknown	760
TOTAL	6178

Comparative Statement of Registration
Sessions 1932-33 to 1941-42

Session	Arts and Science	Applied Science	Nursing	Agriculture	Teacher Training Course	Total Winter Session	Summer Session	Short Courses	Grand Total
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	279	3152
1938-39	1634	419	59	117	57	2286	659	290	3235
1939-40	1664	434	65	139	69	2371	715	253	3339
1940-41	1724	466	60	166	71	2487	587	206	3280
1941-42	1763	488	63	155	68	2537	457	184	3178

Comparative Statement of Degrees Conferred
Sessions 1932-33 to 1941-42

Year	M.A.	B.A.	B.Com.	M.A.Sc.	B.A.Sc.	B.S.F.	B.A.Sc. Nursing	M.S.A.	B.S.A.	Total	Grand Total
1932	17	201	15	2	37	-	4	9	6	291	2832
	6	36	1	-	6	-	-	-	-	49	2881
1933	19	215	22	8	44	-	7	4	12	331	3212
	4	46	5	3	5	-	-	-	1	64	3276
1934	11	204	31	3	37	-	5	4	12	307	3583
	6	36	5	1	5	-	-	1	3	57	3640
1935	14	196	23	8	57	-	13	2	19	332	3972
	12	45	5	-	5	-	-	-	1	68	4040
1936	15	175	21	6	50	-	7	5	16	295	4335
	10	38	1	2	3	-	-	3	2	59	4394
1937	21	190	28	4	48	-	2	7	14	314	4708
	9	54	8	-	6	-	1	1	1	80	4788
1938	20	204	31	6	56	-	7	3	19	346	5134
	10	53	3	2	4	-	-	-	5	77	5211
1939	19	217	22	7	71	-	8	4	22	370	5581
	5	63	6	-	9	-	-	1	2	86	5667
1940	30	212	37	4	71	-	13	3	18	388	6055
	6	62	1	-	1	-	-	1	3	74	6129
1941	21	189	26	7	81	1	8	2	19	354	6483
	8	73	9	1	-	-	-	3	-	94	6577
1942	14	170	52	9	82	3	6	2	26	364	6941

Comparative Statement of Diplomas Issued
Sessions 1932-33 to 1941-42

Year	Teacher Training	Public Health Nursing	Social Service	Occupational Course in Agriculture	Totals
1932	85	8	2	7	102
	12	1	11	-	24
1933	58	13	4	-	75
	-	1	5	-	6
1934	61	10	-	-	71
	3	-	3	-	6
1935	65	15	3	3	86
	1	-	7	-	8
1936	60	15	-	-	75
	-	-	12	-	12
1937	39	16	-	4	59
	1	5	19	-	25
1938	65	18	1	3	87
	-	2	15	-	17
1939	54	14	2	4	74
	1	1	24	-	26
1940	66	12	3	5	86
	2	-	23	-	25
			Social Work		
1941	68	9	1	2	80
	-	-	22	-	22
1942	59	10	4	4	77

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
Aldous, John	Scholarship in Physiology	$800	Biology	University of Toronto
Ashford, Walter R.	National Research Council Studentship	$750	Chemistry	Cellulose Research Laboratories, McGill
Bishop, Roger	University Fellowship	$500	English	University of Toronto
Brewer, Charles P.	National Research Council Studentship	$750	Chemistry	Cellulose Research Laboratories, McGill
Buckland, Donald C	Graduate Scholarship	$1,200	Forestry	Yale University (School of Forestry)
Clark, Robert M.	University Scholarship	$1,000	Economics	Harvard University
Covington, Arthur E.	National Research Council	-	Mathematics & Physics	Ottawa
Cox, Ethel Jane	Teaching Fellowship	$750	Accounting	University of California, Berkeley
Dale, Ursula	Scholarship in Physiology	$700	Biology	University of Toronto
Davidson, John F.	Scholarship	$800	Botany	University of California, Berkeley
Dill, Charlotte E.	Assistantship in Plant Pathology	$800	Plant Pathology	Cornell University
Fitch, Fred T.	Teaching Fellowship	$600	Chemistry	University of Purdue
Fowle, Charles D.	Teaching Assistantship	$650	Zoology	University of California
Gardner, Joseph A.F.	National Research Council Studentship	$750	Chemistry	Cellulose Research Laboratories, McGill
Grant, Jack D.	University Fellowship	$500	English	University of Toronto
Grant, W. Leonard	Reuben Wells Leonard Fellowship	$500	Classics	University of Toronto (renewal)
Hulley, Clarence C.	Double Assistantship	$1,100	History	University of Wisconsin
Leech, Geoffrey B.	National Research Scholarship	$425	Geology	Queen's University
Mitchell, Leonard	National Research Council Studentship	$750	Chemistry	Cellulose Research Laboratories, McGill

Name	Award	Value	Subject	Where Tenable
Moodie, Charles D.	Research Fellowship	$375	Agronomy	Washington State College, Pullman
Macdougall, J. Innes	University Fellowship	$840	Education	University of Washington
Perry, Neil	Fellowship	-	Economics	Harvard University
Perkins, Maurice	Scholarship	$975	Statistics	University of California, Berkeley
Poole, John B.	Research Fellowship	$1,000	Zoology	Zoological Society of San Diego
Sibley, William M.	Fellowship	$1,200	Philosophy	Brown University
Stuart, F. A.	Teaching Fellowship	$600	Chemistry	University of Iowa
Tate, Dorothy	Rockefeller Fellowship	$2,500	Nursing	Rockefeller Foundation, Columbia University
Waddell, David	Scholarship in Physiology	$800	Biology	University of Toronto
Willard, J. H. Wm.	Fellowship in Physiology	$1,000	Medical Research	University of Toronto
Williams, Edwin P.	Graduate Fellowship	$600	Geology	Harvard University

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

Value of scholarships, fellowships and bursaries won by our graduates in other Universities and in Institutes in 1942.....$23,215.00

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..... $719,509.00

Respectfully submitted,

CHARLES B. WOOD,

Registrar.

REPORT OF THE DEAN OF THE FACULTY OF ARTS AND SCIENCE

Student Progress

Despite the many distractions caused by the war, the standards of student achievement were on the whole equal to those of previous peace-time years. Many students were much disturbed in mind as to whether they should enlist or should finish their year or their course. A considerable number, however, did enlist before their final examinations in April. No formula was decided upon as to credits granted upon enlistment except that a Fourth Year student who enlisted was allowed to graduate with one three-unit subject short of the requirements for a degree. Very few graduated in this way. Some students were called up before they could write their final examinations but they were granted standing in those subjects in which they were recommended by their instructors. If they were not recommended, they were granted deferred examinations, that is, the privilege of writing at any subsequent examination period without the payment of a fee.

Professors Visiting other Universities.

Dean Daniel Buchanan	University of California at Los Angeles.
Dr. G.G.Sedgewick	University of Southern California (Both terms).
Professor F.H.Soward	University of Southern California (First term).
Dr. Ian McT. Cowan	University of California, Berkeley.

Professors on Leave.

Professor Henry F. Angus	Department of External Affairs, Ottawa.
Dr. A. M. Crooker	Research Enterprises Limited, Toronto.
Dr. Kenneth C. Mann	National Research Council, Ottawa.
Dr. Thomas G.Henderson	Chief Intelligence Officer, Seventh Division of the Canadian Army.

Departmental Activities.

Department of Bacteriology and Preventive Medicine.

Dr. C. E. Dolman continued his researches into the staphylococcus toxins with special emphasis upon food-poisoning substance. Strains for identification and opinion as to their capacity to cause food-poisoning were received from Professor G. S. Wilson, Director of the Emergency Public Health Laboratory Service in England.

Dr. D. C. B. Duff completed his investigations, originally launched on behalf of the Fisheries Research Board of Canada, on the possibility of protecting game fish against infection with *Bacterium salmonicida* by oral administration of killed vaccine.

Dr. Lawrence E. Ranta's research activities were confined chiefly to various problems connected with the cholera bacillus. Methods of improving the immunizing power of certain vaccines were investigated.

Mr. D. B. Mathias continued researches on undulant fever. He verified a previous observation that whole heat-killed vaccine is a very efficacious immunizing agent in mice.

It was a compliment to the Department that Miss Eleanor Taylor, B.A., a Fellow under the United States Public Health Service, should select this University from among all the universities of North America to pursue post graduate work before returning to her position as State Bacteriologist in the State Laboratory of New Mexico at Albuquerque.

Mention should be made of Dr. Dolman's work in connection with the Red Cross Blood Donor Clinic.

Department of Biology and Botany.

Dr. Andrew H. Hutchinson continued his investigations into Medicago (Alfalfa) Hybrids. He found that seed production is related to many factors, primarily to the cytological disturbances due to hybridization. Strains may be obtained which may occupy different habitats.

Mr. John Davidson revised his edition of The Cascara Tree in British Columbia, (Illustrated).

Dr. John Allardyce completed an investigation on Carotene in Feed Grasses. In his investigations on the Effect of Hormones and Irradiation on Growth, Dr. Allardyce followed two main approaches, viz., physical and nutritional. In the first, some one thousand Wistar rats were subjected to long spells of selected portions of the spectrum. In the second, diets were given which were overloaded with either a fat, a carbohydrate, or a protein but always having the same caloric value.

Department of Chemistry.

The research work of the Department of Chemistry during the year was practically all on war work. Several reports on the progress of the work undertaken were submitted to the National Research Council of Canada, and to all other Research Institutions of the Allies working on similar problems. There were many interesting comments from abroad particularly from Great Britain where much interest was shown, especially in the new cordites used in making time fuses. The work on explosives reached such proportions that practically the whole Department devoted its research time to it.

The war investigations were directed by Dr. R. H. Clark who, as a member of the National Research Council, kept in close touch with the work desired or carried on by the Council.

Dr. W. F. Seyer and Mr. John D. Leslie concluded a research on The Viscosity of Cis and Trans Decahydronaphthalene. The results were published in August, 1942.

Dr. M. J. Marshall continued his investigations on activated carbons and war gases.

In collaboration with the Department of Mining and Metallurgy, Dr. William Ure made a partially successful attempt to concentrate aluminium oxide from low grade deposits at Sooke, Vancouver Island. He also continued his investigation into the Flotation of Sphalerite and The Effect of Unsaturation on the Pyrolysis of Ether.

Dr. J. A. Harris worked on the development of A New Organic Reagent for the Volumetric Determination of Tin and on The Use of Amyl Alcohol in the Separation and Analysis of Aluminium and Beryllium. Papers on these two projects were read before the Royal Society of Canada in May.

Department of Education.

An investigation of Spelling Readiness was carried out by Dr. D. H. Russell with the aid of a grant from the Canadian Council for Educational Research.

Dr. Frederick T. Tyler, aided by a grant from the Co-operative Studies Committee, continued his research in Concept Development.

The policy of the Department of offering Saturday morning classes was of great benefit to many of the teachers of the Lower Mainland. This was particularly the case since the establishment of the new degree of Bachelor of Education. Several of the teachers, however, who would have liked to have attended these courses, were prevented from doing so on account of the various war activities in their schools demanding their spare hours.

Department of Geology and Geography.

The following activities of the members of the Department of Geology and Geography were carried on mainly during the summer of 1942:

Dr. M. Y. Williams continued unofficially as consultant to the British Columbia Department of Mines in connection with the Peace River oil resources.

Dr. Clarence O. Swanson continued as consulting geologist to the Consolidated Mining and Smelting Company. His field work was carried on at Kimberley and at the Maryville magnesite deposits.

Dr. Henry C. Gunning assisted Dr. Swanson at Kimberley and also acted as consultant for the Privateer Mine in the development of a molybdenum deposit at Rossland. He started some special investigations of tin at the Sullivan Mine and examined the newly discovered scheelite deposit at Salmo.

Dr. H. V. Warren's investigations during the winter were directed towards completing his "Gold Research" and carrying on new investigations of strategic minerals. Partly through his efforts,

the British Columbia War Metals Research Board was formed. The Board includes representatives of the Provincial Department of Mines, the Dominion Department of Mines and Resources, the British Columbia Mining Association, and the Geological and Metallurgical staffs of the University. In the summer he made his usual valuable collection of minerals and acquired some relatively rare minerals through exchange. Further, he organized a scientific prospecting party for the Highland Bell Mining Company. Discoveries of antimony and mercury were made by this party and are under investigation.

Dr. N. F. G. Davis was in charge of general field operations for the Highland Bell Company.

Department of History.

Dr. W. N. Sage continued his investigations in the field of British Columbia History. As a member of the Research Committee of the Canadian Social Science Research Council, he prepared a report on M.A. work in the various Canadian universities.

Professor F. H. Soward's research activities are shown in part by his books and articles in the List of Publications. He had in preparation a chapter on "Canada's Policy in the Post War World" for a volume on Reconstruction to be published by the Canadian Institute of International Affairs. As in previous years he assisted in editing the section on Canada for the 1942 Political Handbook of the World.

Mr. A. C. Cooke directed his attention chiefly to the field of High School bibliography of selected readings and of teaching materials.

Dr. Sylvia Thrupp continued with her work on the preparation of a book on Medieval London.

Department of Mathematics.

During the year under review Dean Daniel Buchanan completed a research on Periodic Orbits for Four Finite Bodies with Repulsive and Attractive Forces. He also obtained results in his investigations of Trojan Satellites (Limiting Case) which warranted their presentation to the Royal Society of Canada in May.

The Head of the Department had, as Dean and otherwise, many non-mathematical duties demanding his time so that as a result several of his researches were unfinished. In addition to being the Acting-Head of the Department of Economics, Political Science and Sociology, he served in the following capacities:

Chairman, Mathematics Section, High School and Matriculation Board of Examiners.
Member of the High School Accrediting Board.
Chairman, Special Committee on University Entrance Examinations.
Chairman, Provincial Advisory Committee on Unemployment Insurance.
Vice-President, Vancouver Canadian Club.

Mr. Walter H. Gage rendered valuable service in teaching Mathematics for the Radio Technicians. He also gave instruction in Air Navigation to students who were planning to go on Active Service with the R.C.A.F. at the close of the session.

Dr. S. A. Jennings prepared manuscripts in more or less finished form on Nilpotent Rings and Groups and on Some Theorems on Nilpotent Rings. He also continued work on the Restricted Lie Algebras, Representation of p-Groups, and, in collaboration with Dr. Ralph Hull, Minimal Bases for Galois Extensions of Algebraic Function Fields.

Department of Modern Languages.

Dr. David O. Evans and Dr. A. F. B. Clark contributed to the Critical Bibliography of French Literature in course of publication under the auspices of the Carnegie Corporation of New York. Very few institutions, including graduate schools, had more than one representative in this list. The University of British Columbia was honoured in having the only Canadians contributing.

In addition to his work in connection with preparing a Boileau bibliography for the Critical Bibliography above cited, Dr. Clark, at the request of Professor Viàtte of Laval University, undertook to prepare and edit an Edition of Racine's plays for the Edition de L'Arbre (Montreal).

Mr. Ronald Hilton, now Associate Professor at Leland Stanford University, prepared, while a member of our staff, his Bibliography of Spanish Source Material in the United States (Toronto Press, 1942). It is a complete and valuable record of all the facilities available for Spanish studies in the various United States libraries and universities.

Department of Philosophy and Psychology.

During the summer of 1942, Professor John A. Irving, upon the invitation of the Honourable the Minister of National War Services, served in Ottawa as Research Secretary to the Dominion Government's Committee on Morale. As such he was sent to Washington, New York and Boston, in August, as an official representative of the Canadian Government. Strong pressure, including an offer of a very decided increase in salary, was brought to bear to induce him to remain in Ottawa "for the duration". He declined to accept the offer, realizing, mainly through his own perception and partly through the misgivings of his Dean, the disastrous effect his absence would have upon his Department. He continued to act on the Committee in an advisory capacity.

The researches carried on in the Department were as follows:

Professor Irving. (1) Work on a chapter for a forthcoming volume entitled Resistance to Social Change, prepared under the auspices of a Committee of the American Psychological Association;

(2) work on a book on Symbolism; (3) an article on "The Psychological Analysis of Wartime Rumor Patterns in Canada" for publication in the Bulletin of the Canadian Psychological Association.

Dr. Joseph E. Morsh. (1) Work, with Dr. Frederick T. Tyler, on an experimental study of concept formation; (2) work, with Mrs. S. A. Jennings, on The Problem of Eneurisis.

Dr. Tyler. (1) With Dr. Morsh as above listed; (2) a statistical analysis of the Otis Test at the Grade VI level.

Dr. Alexander P. Maslow, Work on the foundations of the Theory of Probability.

Professor Irving was one of eleven lay commissioners to represent the British Columbia Conference of the United Church of Canada at the Tenth General Council of the United Church of Canada. He addressed the Educational Council on The Educational Policies of the United Church of Canada.

Department of Physics.

The registration in the elementary classes was somewhat higher than usual, but a similar increase had not taken place in the senior years. However, if the efforts of the Wartime Bureau of Technical Personnel to meet the wartime demands for physicists produce results, a very much larger enrolment in physics courses may be expected.

During the year members of the staff assisted with the Radio Technicians' Course. Dr. George M. Volkoff gave also a short lecture and laboratory course to army X-ray technicians.

As Dr. Gordon M. Shrum had charge of the Department of University Extension and was also Officer Commanding, C.O.T.C., he had little time to do any work in physics other than administration and direction of research. Both these were done quite satisfactorily, in spite of the many demands upon his time.

Dr. A. M. Crooker, on leave, was in charge of the design of all optical service instruments being produced by Research Enterprises Ltd., including a variety of range finders and periscopes

Dr. Kenneth C. Mann, on leave, was at the National Research Council in charge of a group of research men working on the Radio Locator.

With the purchase, the previous year, of the D-78 Spectrograph, a D-70 Spectrographic Camera and another Spectrographic Camera of much shorter focal length, Dr. Harold D. Smith and Mr. Norman Barton carried on investigations of the Raman effect of petroleum compounds. Certain of the series of compounds of saturated hydrocarbons from tetradecane were studied and information was obtained which is of fundamental importance to the petroleum industry.

Department of Zoology

As with the other sciences there was an increase in the numbers of students taking Zoology, particularly in the pre-medical courses.

Dr. W. A. Clemens continued his study of the sockeye salmon data collected annually by the Provincial Fisheries Department. With Mr. Van Wilby, he made considerable progress with the preparation of the manuscript dealing with the marine fishes of the British Columbia Coast.

The investigations on fish nutrition dealt with experiments to determine a cheap ration, well balanced in respect to proteins and fats and supplemented by vitamins, for the feeding of trout in the hatcheries. By examining the stomach content of several hundred trout Dr. Clemens obtained data from which it will be possible to calculate the proportions of protein, fat carbohydrates, and mineral salts in the natural diet. Information was also obtained by Dr. Clemens and Mr. G. J. Spencer concerning the distribution and abundance of fresh-water organisms serving directly or indirectly as food for trout in the various areas of the Province.

Dr. Clemens with the help of Mr. R. W. Pillsbury, spent some time in preparing information concerning the distribution of Marine Shellfish (Mollusca) of the British Columbia Coast.

Mr. Spencer continued his long-term investigations on the following: (a) insects affecting stored products in homes in British Columbia; (b) the fauna of birds' nests in British Columbia and (c) ectoparasites of birds and mammals in British Columbia. He devoted, also, a good deal of time to the preparation of an account of the bionomics of grasshoppers, based upon his investigations of past years.

Dr. Ian McT. Cowan carried out a study of the food habits of the barn owl in British Columbia and began a general survey of the parasites and diseases of birds and mammals in the Province. He also continued his investigations in the life history of Columbia black-tailed deer, special emphasis being laid upon food habits, parasites, and disease. The report on the food habits was completed and was ready for publication. The life histories of three parasites, the nose fly, the louse fly, and the bladder worm, were studied. Findings concerning the first two were completed and put in manuscript form. A general survey of disease in the deer was continued throughout the year. Six deer were posted. One hundred fifty microscopic slides of normal tissue and fifty slides of pathological tissue were prepared and studied.

At the request of the Provincial Game Commission, Dr. Cowan made an investigation to determine the extent of the damage to field crops in the Okanagan Valley attributed to pheasant activity and to attempt an evaluation of the economic position of the pheasant in that area. By the end of August, 1942, one hundred twenty-three pheasant stomachs had been examined and their contents

measured and identified. Crop damage was examined and other data were obtained relative to the economic position of the pheasant.

Extra-Sessional Classes.

No Extra-Sessional Classes were offered during 1941-42. That was the first session such classes were not given since they were started in 1928-29. There were insufficient numbers of teachers desiring any particular class to warrant offering any courses. The needs of the teachers were met, however, in three ways: (1) by the Directed Reading Courses; (2) by arrangements whereby a candidate attended only the Saturday mornings of a regular course and prepared the rest of the work by private reading; and (3) by attending the Saturday morning classes offered by the Department of Education. In none of the above instances was an additional payment of an instructor necessary.

Directed Reading Courses.

There were two Directed Reading Courses during the year, English 2 and History 2.

English 2. The course consisted of a survey of English Literature from the beginning of the Elizabethan Age in 1557 to the death of Shelley in 1822. The prescribed readings were very heavy. The course was divided into three parts and as each part was completed, at the end of December, February and April, respectively, a searching test in detail was sent to each student. The final examination, general in character and covering the whole course, was given at the opening of the Summer School.

Throughout the session bulletins were sent explaining the requirements, directing attention to important matters, analysing and co-ordinating the readings, and suggesting study methods. In all sixteen bulletins were sent out, amounting to eighty pages of typewritten matter. It is gratifying to record that during the whole session not a single letter was received asking assistance with the work or for clarification of any point. It seems a fair conclusion that the material sent out in the bulletins was not only ample in volume but also adequate in content and presentation.

History 2. Eleven bulletins were prepared and distributed. Since the majority of those enrolled were teachers who were conversant with the facts of Canadian History, the bulletins were therefore made as concise as possible. Second Year students were given the option of four reports or two essays during the session. Some chose two reports and one essay. Third and Fourth Year students were required to do an essay in addition to the requirements set out for the Second Year. In their letters and verbal statements at the Summer School 1942, the students expressed their appreciation of the advice and suggestions given.

The standard of performance was on the whole higher than that of the intra-murals. This may be due, in part, to the fact that the poorer ones fell by the wayside. The later reports and essays were of a higher quality than the earlier, a testimony not only to the diligence of the candidates but also to their ability to profit from the suggestions and criticisms offered by the instructor and reader.

Conclusion.

To all the instructors for their faithful work in the class rooms and in the laboratories, to all the members of Faculty who, in addition to their class instruction, gave much valuable time on Committees, and to all the members of the staff, the Dean expresses his appreciation and thanks.

Respectfully submitted,

DANIEL BUCHANAN

Dean

REPORT OF THE DEAN OF THE FACULTY OF APPLIED SCIENCE

In the annual report for the year ending August, 1941, it was recorded that recommendations for changes in curriculum had been referred to a Committee of Senate for further study. The Committee reported favourably and Senate duly adopted its report, subject to the approval of the Board of Governors as to the necessary financial arrangements. The principal change recommended was the transfer of Chemistry 2(b) from the third year to the second year so that both Chemistry 2(a) and 2(b) would be included in the second year curriculum. This change would permit a limited amount of specialization in the third year and would enable students in Chemical Engineering to take some advanced courses in Chemistry in that year. In May, 1942, Senate was informed that the Board of Governors had not been able to make provision in the budget for the proposed changes in curriculum.

Some minor changes in curriculum and numerous revisions in content were made in several departments. Treatments of strategic war minerals were introduced into courses in Metallurgy. Changes in courses in Mechanical Engineering consisted chiefly in grouping related subjects into full year courses, thus obtaining a better balance in the work of the fourth and fifth years. In the course in elementary structural design, special emphasis has been placed on the design of wooden structures, and students in Mining taking this course are now given instruction in the design of head frames and other structures of particular interest to mining men. Repairs on hydraulic equipment made possible an extension in laboratory experiments in this subject. In the Electrical Engineering course special emphasis is being placed on radio work because of the increased demand for men in this field. In the Department of Nursing and Health closer supervision of field work facilities provided by the Metropolitan Health Committee and the rural health units enabled students to obtain the best possible instruction therefrom. Closer contact with the Vancouver General Hospital School of Nursing has continued to prove very beneficial to the students during their hospital course and has greatly strengthened the relations between the University Department and the Hospital School of Nursing. Special courses in home nursing, first aid, community health and social needs were provided for extra-departmental and extra-mural students by members of the staff. Members of the staff attended and took part in a refresher course for public health officials given under the auspices of the Provincial Board of Health.

In response to requests from the Registered Nurses' Association of British Columbia a post-graduate refresher course, extending over a period of two weeks in July and August, was arranged by the Department of Nursing and Health in co-operation with the Registered Nurses' Association. Instruction was provided in various aspects of supervision in public health nursing. The total attendance was 48, including 32 public health nurses and 16 social workers. Mimeographed outlines of all the lectures were prepared by

the Department and distributed to those enrolled in the classes. The course was very successful and members of the Department are prepared to develop similar courses for which there may be a demand.

The registration showed a marked increase over that of any previous session, and notwithstanding the number of hours each week devoted to military training, academic standards are being well maintained. Difficulties experienced in maintaining standards are caused by inadequacy of accommodation, staff and equipment. The necessity for increased class room and laboratory space was stressed in my report for the academic year 1940-41, and the conditions therein described still prevail. Due to the increased demand for graduates in industry and the armed forces, it was found impossible to obtain the services of competent instructors to fill the junior positions on the staff. For the first time in the life of this Faculty senior undergraduate students were employed as part-time readers and assistants. This contingency is one for which there is no apparent relief. Existing priorities for war purposes have caused repeated postponements of delivery of essential apparatus for university laboratories.

Notwithstanding these difficulties some additions were made to our laboratory equipment. In the Electrical Engineering laboratory a four-panel switch-board was installed and a fair amount of radio equipment procured. The loan by the Ford Motor Company of Canada of a 95-horsepower engine, fitted with a Froude brake, designed and constructed in our own laboratory, will give senior students in Mechanical Engineering the opportunity to make tests on a modern gasoline engine. Additions to the equipment in the laboratories of the Department of Mining and Metallurgy include a gas heated furnace for high temperature heat treatment, an automatic temperature controller for heat-treating muffle, a furnace for pyrometer calibration, a mechanical agitator for leaching tests, and a small single-phase electric arc furnace for investigating the electric smelting of certain ores. There is an urgent need for an electric induction furnace to provide facilities for the investigation of problems in the welding, brazing and hardening of metals.

Although the teaching load carried by members of the staff has been increased, considerable attention has been given to research problems. Investigations under the direction of the staff of the Department of Mining and Metallurgy include:

Leaching nickeliferous pyrrhotite with solutions of ferrous-ferric chloride.

Investigations into gold and cobalt recovery from Little Gem ore.

Tests on British Columbian arsenical ores.

Roasting and cyaniding tests on Tamarac gold ore

Tests to determine the usefulness of the roasting procedure developed in previous years.

Tests to determine the possibility of extracting gold by cyanidation of sulphide ores which had been subjected to roasting in an inert atmosphere.

Tests on powdered iron from pyrrhotite residues.

Analysis of barite.

Roasting and cyaniding of a gold concentrate

"Calorizing" for surface protection of metal

Tests on tungsten ore, bog and manganese ore for battery use, compounds for improving coal for domestic use, production of carbon for activation, fusion point of clay.

The expanding need for metallographic studies is reflected in the large number of investigations carried out during the year. Included under this classification are tests on valve-guides for aeroplane engines, technique of rivet-heating for shipyard work, analysis of bronze gears, flux for soft solder, elimination of scaling during forging of ships' channels, heat-treatment of a weld, calibration of a Vickers' hardness testing machine, carburizing gun parts, substitute spring steels and properties of alloy steels for gun manufacture.

Researches in the ore dressing laboratory produced successful processes for several mining properties, including Highland Bell Mine (silver), Little Gem (cobalt-arsenic), Pacific Nickel (nickel), Kelowna Exploration Company (cobalt-arsenic) and Salmo (tungsten).

The opening of a Vancouver Branch of The American Society of Metals in October, 1941, strengthened the close association that has existed between the University and the mining and metallurgical profession in the community. Members of the staff contributed to a course of lectures sponsored by the Society in association with the Department of University Extension. A University Chapter of The American Institute of Chemical Engineers was authorized at the close of the academic year.

At the annual meeting of the British Columbia Division of The Canadian Institute of Mining and Metallurgy in October, Professor F. A. Forward presented a paper on "Research and the Mining Industry", which received favourable comment from mining men in attendance. The interest manifested in the presentation was such that following conferences with representatives of the Provincial and Dominion governments, the Mining Association of British Columbia, and the University, there was established The British Columbia War Metals Research Board for the purpose of developing and utilizing the strategic metal resources of the Province of British Columbia. The Board, which is under the joint sponsorship of the Provincial Department of Mines, the mining industry, the Federal Department of Mines and Resources, and the Federal Controller of Metals, was granted the use of the laboratories in the University's Mining Building during the summer months. Valuable work has been done by the technical staff under the direction of

Professor Forward, resulting in the recovery of quantities of strategic metals from properties now in operation. The Emerald Mine near Salmo, B.C. is now being equipped for the production of tungsten in commercial quantities and the development of other properties is under consideration. It is a matter of satisfaction to note that the University has been able to make a definite contribution to this important national effort.

In the Department of Forestry, sample plots were designated to determine the effect of various degrees of thinning in young alder stands, and the work of cruising and compilation of growth and yield data in the University Forest was continued. Small projects in pruning, determination of highest growth in plantations, and effectiveness of cultural operations in plantations were developed. Professor F. M. Knapp has been collecting information on the history of logging in West Point Grey and the University Forest. All members of the departmental staff were engaged in investigative work during the summer months.

In January, 1941, Mr. J. E. Liersch, B.A., B.A.Sc.,M.F., was appointed Professor and Head of the Department of Forestry. In January, 1942, shortly after he had entered upon his duties as such, his services were requisitioned by the Timber Controller of Canada for the purpose of speeding up production of sitka spruce, urgently needed by the governments of Canada and the United Kingdom for airplane construction. The Board of Governors granted leave of absence to Professor Liersch to enable him to undertake this important national service.

Mr. E. G. Matheson, a former member of the staff of the Department of Civil Engineering, presented a valuable collection of textbooks and transactions of technical societies. I have pleasure in making formal acknowledgement of this most acceptable gift. Thanks are due also to the Caterpillar Tractor Company for the loan of one of its tractors to the Department of Forestry and to the Ford Motor Company of Canada for the loan of a modern gasoline engine to the Department of Mechanical and Electrical Engineering.

It is a pleasure to record my appreciation of the faithful co-operation extended to me throughout the session by the governing bodies, the teaching staff and the students.

Respectfully submitted,

JOHN N. FINLAYSON,

Dean.

REPORT OF THE DEAN OF THE FACULTY OF AGRICULTURE

The Faculty of Agriculture has carried on with all teaching and research in as normal a way as the emergency war conditions have permitted. There were no major changes within the year.

Department of Agricultural Economics.

The study, A Factual Survey of the Fraser Valley Dairy Industry and the Greater Vancouver Milk Market, was completed and mimeographed during the year. The work on this report was done largely by Mr. R. P. Forshaw, as Assistant in the Department, and the cost was underwritten by Safeway Stores Limited.

Department of Agronomy.

Wheat Report.

In the course of the year an important report was completed, entitled "Wheat Studies in British Columbia". This report represents several years of work, including field experiments by Dr. G. G. Moe and associates. The report is an important contribution to our knowledge of wheat in British Columbia.

Because of the highly technical nature of this report and the consequent limited demand for it, only five copies have been prepared. One copy has been filed with the Department of Agriculture, Ottawa, one with the Department of Agriculture, Victoria, one in the Library of The University of British Columbia, one with the Dean of the Faculty of Agriculture, and the fifth in the Department of Agronomy.

Alfalfa.

Seedings of alfalfa of the underground, spread-in type have been made in the following places for purposes of seed production:

The University of British Columbia - 3 acres.
Guichon Ranch Company, Ltd., Quilchena - 1.7 acres.
Fairbridge Farms, Duncan, V.I. - ½ acre.

Seed Work.

The following foundation stock seeds were produced by the Department of Agronomy in co-operation with the Provincial Department of Agriculture. The cost of this production was underwritten by the Department of Agriculture, Victoria, B.C.

Victory oats	2383 lbs
Eagle oats	962 "
Kharkov wheat	1024 "
Dawson's Golden Chaff wheat	992 "
Jones' Fife wheat	861 "
Ridit wheat	852 "
Storm rye	872 "
Root seed, Mangels, Yellow Intermediate	34 "
Swedes, Bangholm	15½ "
Flax seed	1342 "

Potatoes and Flax.

The eye index work on potatoes and the work with fibre flax were continued on the same basis as during the previous year.

Soil Survey.

During the summer of 1942, Dr. D. G. Laird and Mr. Laurie Farstad, representing the Provincial and Dominion Departments respectively, conducted a soil survey in the Vanderhoof-Fraser Lake area, This study is introductory to more detailed studies that may be a guide to a settlement policy.

Department of Animal Husbandry.

The following projects seemed to be of special importance:

Bang's Disease.

Since May 1st, 1940, a total of forty-seven animals has been vaccinated against the disease. Twenty head were vaccinated as older cattle, all being twelve months or older. Twenty-seven head have been vaccinated as calves under eight months of age. No abortions have occurred among those vaccinated when they were more than twenty-four months of age; four of these were mature cows. There have been three calvings to date, with three more due to calve shortly among the group vaccinated when they were under twelve months of age. Within this group at date of the last blood test, there were twelve fully negative animals, two continuing reactors, four showing a vaccination "take", and nine to be vaccinated. During the year only three abortions have occurred in the entire herd, these three being in naturally infected animals that had aborted in previous years.

Pullorum Disease Work.

During the year approximately 270,000 samples of blood were tested. Post-mortems for laboratory diagnostic proof of test reactions were made on about fifty birds. Two flocks required additional investigation, but this work was not completed due to shortage of labour on farms which prevented the full co-operation of the owners.

Department of Dairying.

Laboratory Accommodation.

Special attention is drawn to the fact that this Department is severely handicapped by very limited laboratory accommodation. Congestion exists in all departments of the Faculty, but it is particularly acute in this Department. Approximately three times the present accommodation is essential to the attainment of highest efficiency in teaching.

Short Course in Cheese-making.

Under the Department of University Extension, a two weeks' Short Course in Cheddar Cheese-making was held by the Department of Dairying from April 7th to 17th, inclusive. The Course was arranged at the request of the B.C.Branch of the Canada Produce Association. It was planned to supplement the work given at the Short Course held in the Spring of 1941. As on previous occasions, the University enjoyed the co-operation of the Dominion and Provincial Departments of Agriculture. Mr. T. J. Hicks, Senior Dairy Produce Grader of the Marketing Service, Dominion Department of Agriculture, again served as Chief Instructor. He was assisted by Mr. H. A. Mason, Dairy Produce Grader for the Province, and by the staff of the Dairy Branch of the Provincial Department of Agriculture under Mr. Henry Rive. Ten experienced cheese-makers from various parts of the Province attended the Course.

Greater Vancouver Water District Board.

Pending the completion and equipping of their own laboratories, the Greater Vancouver Water District Board availed themselves of the facilities of the Department for urgent work connected with the Vancouver water supply.

Mr. Howard of Toronto, Consultant to the Board, worked in the laboratory from July 13th to August 2nd. Miss Worthington, Bacteriologist with the Board, continued the work during the month of August.

The facilities of the Department which were made available to the Board consisted in large measure of equipment and apparatus of a permanent nature, difficult to obtain owing to the scarcity of certain metal supplies and to the demand for this type of equipment by the Armed Forces. Certain supplies of a perishable nature, urgently required for the work of the Board, were also made available, but in no instance was the work of the Department in any way hampered and all materials put at their disposal have since been replaced.

Dr. E. A. Cleveland, Chief Commissioner of the Board, has expressed to the Department his appreciation and thanks for the courtesies extended.

Department of Horticulture.

Special mention is made of the following projects:

Vegetable Seed Trials.

For the sixth consecutive year the Department of Horticulture has conducted a series of vegetable seed trials. This work was commenced in 1937 as a co-operative project between the Plant Products Division, Production Service of the Dominion Department of Agriculture, and the University of British Columbia.

In this year's trials there were some samples of seeds on test. As usual, the Department of Horticulture provided the necessary land, the labour for fitting the area and all materials used, including animal manure, commercial fertilizer, spray materials, stakes and labels. The labour costs were cared for by a special grant from the Dominion Department of Agriculture ($600.00), supplemented by contributions of $310.00 from other sources as follows:

British Columbia Seed Growers' Association.....	$125.00
Provincial Department of Agriculture	125.00
Wm. Rennie Seeds Ltd.....	35.00
Brackman-Ker Milling Co.Ltd., New Westminster.....	25.00
TOTAL	$310.00

This vegetable seed testing work is proving of distinct value and should become increasingly important as the war has created an extremely heavy demand, at home and abroad, for Canadian grown seeds.

Raspberry Failure Research.

The U.B.C. raspberry planting continues to yield a wealth of information. This year, and until such time as couch grass is eliminated, the cover-crop plots were changed over to clean cultivation. A 5x5 micro-element experiment was substituted. The elements used were boron, copper, manganese and zinc. The remainder of the experiment was conducted as in previous years.

The micro-elements had no effect on yields but some of them had a pronounced effect on the chemical composition of the fruit.

Of the fertilizer treatments, ammonium phosphate plus muriate of potash continued in leading place. The standard 5-10-5 fertilizer has stood up well. For a planting which is not run down, and for continued maintenance, this formula is satisfactory. Where signs of soil depletion occur, ammonium phosphate is recommended. A supplementary report on this project will follow at a later date.

Department of Poultry Husbandry.

Special mention is made of the following projects:

The Record of Performance (R.O.P.) Flock.

At the time of the termination of the lease with Henderson Bros. the Record of Performance and breeding flock, which had been increased considerably by the lessees, was reduced to approximate the original nucleus owned by the University when the lease was drawn. These breeding birds were, of course, the choice of the comparatively large flock developed by the lessees and were exclusively pedigreed birds. In the selection, particular attention was paid to the size and number of eggs as well as to family vigor and type of the birds. As a result of the drastic selection practiced, much of the stock of ordinary grade was disposed of, leaving a foundation breeding unit of good quality.

The pedigreed males chosen to head the R.O.P. breeding pens were the choice of several hundred. In the case of the Rhode Island Reds and Barred Plymouth Rocks they were all early feathering and of Grade A special meat type. A large percentage of the R.O.P. females were of similar grade.

When the breeding work was placed under the control of the Department in the spring, it was then possible to breed by individual pedigree only; moreover, all of the matings, except in experimental breeding, were R.O.P. approved. Thus, for the first time, all of the pedigreed chicks were R.O.P. chicks. Except in the case of the new auto-sexing breeds, the Cambar, the Redbar and the other Crossbreds, it is proposed to confine regular production breeding in the near future to R.O.P. approved matings. From these, in addition to University requirements, a considerable number of R.O.P. cockerels may be supplied for private breeders and hatcheries producing R.O.P.-sired chicks. Two large local hatcheries are now depending to a considerable extent upon University of British Columbia stock for improvement work.

The Cambar-Auto-sexing Breed.

The production of the present generation of Cambar pullets has exceeded expectations. They now approach the other breeds in intensity of egg production, while their meat type is decidedly superior. By back-crossing with the Barred Plymouth Rocks, size and egg production are being strengthened. The breed is now self-supporting and is practically ready for admission to the Standard of Perfection. It is proposed to make the necessary application in the coming year. The following economic qualities will be claimed for this breed as improved and developed to commercial rank by this Department: Auto-sexing, superior fleshing qualities as indicated by extra plumpness and smoothness of carcass, fine bone, creamy white flesh, good egg production, non-broodiness, early maturity, and fast, early full-feathering.

The Nutritive Value of Wheat.

A preliminary study of the nutritive value of wheat in the rations of young chicks was carried out by Miss Dorothy Lawrence. This study consisted of two series of experiments involving forty-four lots, and a total of 1329 chicks. The results showed that wheat can be used as the sole grain of a chick ration, provided it is supplemented with suitable sources of animal proteins, minerals and vitamins. The chicks which were fed wheat as the only grain with the ration grew equally as well as the chicks which were fed a commercial ration, containing a variety of grains. The experiments clearly demonstrated that a variety of grains is not indepensable in the rations of young chicks and that the greater use of wheat in poultry rations would considerably lower the cost of poultry mashes, without, at the same time, sacrificing the value of the mash.

Respectfully submitted,

F. M. CLEMENT,

Dean.

REPORT OF THE DEAN OF WOMEN

Wartime conditions greatly affected the work of the Dean of Women's office in the 1941-42 session. Perhaps the greatest effect was in a marked increase of part-time student employment. The demand for student labour both during term and for the long vacation was greater than the supply. Students wishing employment during term registered their qualifications in the office, which then attempted to direct their services where they could make most use of their abilities. Students thus secured employment both on and off the campus and many were enabled to earn enough for incidental expenses during the term. They were counselled, however, not to attempt more work than could be carried without imperilling their academic standing. In some cases, therefore, where the need was greater than could be met by such part-time employment, financial assistance had still to be given. In the spring, again, there was an eager demand for student services for the summer. All who wished work were able to secure it.

During the year, women students worked actively in the room set apart in the Brock Memorial Building for Red Cross work. Here, acting as a group under the Faculty Women's Red Cross Unit, they made valuable contributions both in sewing and knitting. They also conducted weekly self-denial collections and assisted in other money-making enterprises on the campus. Many students also took the courses in First Aid and Home Nursing offered by instructors from the Department of Nursing and Health. The women's wartime activities increased the work of the office but also resulted in closer relations with the students.

The Girls' Co-operative residence was in close touch with the Dean of Women's office all year. A very attractive house was taken before the term began and the interest of the Faculty Women's Club did a great deal to make the place more homelike for the girls. With money contributed by the club, a dining-room set and dishes were purchased. The club also donated articles of furniture hangings and pictures. Faculty wives were brought into direct contact with the girls when the students showed their appreciation of this interest by holding open house and inviting them to tea.

A great deal to stimulate a pleasant relationship between the Dean of Women and the students was accomplished by the opening of a Dean of Women's room in the Brock Memorial Building at the beginning of the term. This room was furnished through a grant made by the Board of Governors and by gifts from a few generous donors. During the year, the room was used for small social gatherings and was particularly valuable in making it possible to meet groups of students in an informal way. It is difficult to establish an easy relationship with students in the formal atmosphere of the office, and the social room will be of the greatest assistance in breaking down barriers of reserve and diffidence.

Supervising of boarding accommodation, assistance with the programmes of university clubs, information with regard to vocations for women, and the usual duties of the office of Dean of Women were continued. The sororities co-operated in carrying on campus activities and the organization of Phrateres continued to be very helpful.

Since the obligations of the position were unfamiliar to me I could not have carried on the year's work without the friendly spirit with which I was aided on all sides; and I should like here to express my very sincere thanks for the consideration and assistance which I received.

Respectfully submitted,

M. DOROTHY MAWDSLEY

Dean of Women.

REPORT OF THE DIRECTOR OF THE SUMMER SESSION

The twenty-third Summer Session opened on June 29th and closed on August 14th, 1942.

The enrolment by years, and the corresponding figures for the previous three years, are as follows:

	1942	1941	1940	1939
Partial	3	4	11	11
First Year	35	40	62	65
Second Year	95	173	186	211
Third Year	46	62	83	100
Fourth Year	65	59	75	92
Graduates	76	118	159	209
Auditors	2	4	11	25
	322	460	587	713

It was necessary to discontinue three courses because of low enrolments. The numbers of full courses or half courses given were as follows:

	1942	1941	1940	1939
Full courses (3 units)	24	37	44	40
Reading courses (3 units)	2	2	--	--
Half courses (1 1/2 or 1 1/4 units)	6	3	1	2

In addition, the usual courses in Social Work, which were not under the jurisdiction of the Director of the Summer Session, had an enrolment of twenty students.

Of the twenty-seven lecturers, ten were from other institutions. The Universities of Toronto, Chicago, Washington, Southern California, California and Idaho, and Victoria College and the Provincial Normal School at Vancouver were represented.

A valuable feature of the Summer Session programme was a series of ten noon-hour lectures on the conservation of natural resources in British Columbia, arranged by the honorary agricultural fraternity, Sigma Tau Epsilon. In addition, the Summer Session Students' Association sponsored a number of lectures and a musical

programme

The reduction in enrolment caused by the present abnormal conditions must make for some change in the Summer Session programme. Further reduction in the number of courses offered is, of course, inevitable. Also, a policy of appointing a larger proportion of members of our own staff as instructors must receive consideration.

Respectfully submitted,

M. A. CAMERON,

Director, Summer Session.

REPORT OF THE DIRECTOR OF UNIVERSITY EXTENSION

General

A considerable development and expansion of the work of the Department of University Extension has occurred during the year under review. As in the past, the Department has continued to offer a general adult education programme intended to make the resources of the University available in some measure, at least, to all parts of the Province. However, changing conditions during the third year of the war have naturally necessitated certain modifications in this programme. For example, owing to the shortage of young people in rural areas, the rural section of the Dominion-Provincial Youth Training Programme, which had been such a successful feature of the Department's work during the previous three years, had to be curtailed and finally discontinued in January, 1942. However, these curtailments have been more than compensated for by the wide variety of new demands for service which the Department has received. These demands have come both from the various war organizations, governmental and non-governmental, and from the public generally, as a result of the steadily increasing interest throughout the Province in the University's adult education programme.

New Services

Among the many new services offered by the Department, the following have been particularly important.

(i) Film Circuits.

The Department has co-operated with the National Film Board and the Canadian Council of Education for Citizenship in arranging monthly showings of educational films in rural communities which are not served by commercial theatres. Monthly visits have been made to the communities selected and films of an educational and topical nature, many dealing with Canada's role in the war, have been shown in the afternoon to the schools and in the evening to the general public. In co-operation with the Film Board, the Department arranged a circuit of twenty-five communities in the Okanagan area in January, 1942. Each month in the period February to June, some 7500 to 8000 people attended the showings.

In July, the Film Board asked the Department of University Extension to organize and supervise three additional film circuits in British Columbia. Circuits were subsequently organized as follows:

Circuit No. 1 - Lower Mainland and Vancouver Island
Circuit No. 2 - Okanagan Valley
Circuit No. 4 - Kootenay District

Plans were also laid for the organization of Circuit No. 3 in the Prince George area.

The film showings have been found to be a very useful medium for interesting rural communities in the Department's adult education services.

(ii) National Farm Radio Forum.

The Canadian Broadcasting Corporation, the Canadian Federation of Agriculture and the Canadian Association for Adult Education co-operated during the winter of 1941-42 in the presentation of a weekly half-hour broadcast over the National Network of the Canadian Broadcasting Corporation. Each programme presented a dramatization of an important farm problem. For further discussion of the problems raised in the broadcast, listening groups were organized in farm communities throughout the Dominion.

The Department of University Extension co-operated with the B.C.Federation of Agriculture in organizing and co-ordinating the listening groups in British Columbia. Supplementary literature for discussion purposes was mailed to the groups from the Extension Office, and the Director acted as provincial secretary of farm forums in this Province. The farm forum programme provided an excellent opportunity for the Department to be of service both to organized agriculture as represented by the B.C.Federation of Agriculture and to the leaders of farm opinion in rural communities throughout the Province.

(iii) Course in Personnel Administration.
(July 13-18, August 10-15, September 14-19, October 12-17)

In co-operation with the Department of Labour, Ottawa, the Department of University Extension offered a four weeks' course in Personnel Administration. The course was designed to meet the requirements of executives, particularly those in the rapidly expanding war industries, who have found it increasingly necessary to delegate the responsibility for the selection, placing, training, and direction of employees. Employers were invited to send to the course men and women who were members of their personnel departments or who were expected shortly to be chosen for personnel responsibilities. On the recommendation of the Department of Labour, enrolment was limited to forty students. This limit was readily reached, with students coming to the course from industries in all parts of the Province. Instruction was given by trained personnel men from the United States and eastern Canada. Local business executives and Government officials were also invited to take part in the discussions.

Evening Classes and Extension Lectures.

To meet an increased demand, the evening class programme had to be considerably expanded last year. Some thirteen courses were offered in place of the eight given the previous year. For the first time, classes were given in North Vancouver and New Westminster. The following is a list of the courses offered and the attendance:

Amateur Gardening	80	An Introduction to Navigation	75
Business English	43	Plastics in Industry	64
Commercial Law	28	Poultry Husbandry	39
Current History	91	Properties & Treatment of Metals	125
Elementary Economics	35	Industrial Psychology	57
General Botany	49	An Introduction to Poetry	34
Music Appreciation	66		

As in previous years, a large number of lectures were given by Faculty members to organizations in Vancouver and vicinity. Several tours were arranged to outlying communities from which requests for lecturers had been received.

Drama and Radio.

Changing war conditions have resulted in a number of modifications in the Department's Theatre Services programme. Adult drama groups throughout the Province have had to curtail their activities and have not been able to devote as much time as heretofore to a serious study of the Theatre. Particular emphasis has therefore been placed during the past year on assisting directors of young people's groups. To supplement the senior study group course in acting, a new course was prepared entitled "Acting for Juniors."

The Play Lending Library continues to be the medium through which the Department meets the widespread need for dramatic material. New plays, and texts on theatre and radio have been added to the collection. One hundred and thirty-eight registered drama groups availed themselves of borrowing privileges. The total circulation of books and plays was 5606 volumes.

Increasing use has been made of the Department's offer to assist with advice in matters related to the production of plays During the fall of 1941, Miss Dorothy Somerset, the instructor in dramatics, visited nine groups on Vancouver Island.

A two days' "Vancouver Theatre Conference" for drama groups in the lower mainland was sponsored by the Department during the visit of Mr. Barclay Leathem, Executive Secretary of the National Theatre Conference, who was conducting a survey of the Canadian Amateur Theatre at the request of the Rockefeller Foundation. Some fifty delegates attended conference sessions and several committees were formed to study the common problems that emerged from conference discussions.

In the spring of 1942, the instructor in dramatics acted as adjudicator at the Vancouver Drama Festival and at the Nanaimo Speech and Drama Festival. She also conducted a four days' drama course at the Public Affairs Institute held at Camp Elphinstone in August.

In response to a number of requests, the summer course in Radio Script Writing, which had been offered for the first time in the summer of 1941, was repeated July 6th to August 8th, 1942. Mr. Robert S. Emerson, Chairman of the Department of Radio at New York University, was brought to the University as instructor. Twenty-eight students enrolled for the course.

Visual Instruction Services.

There has been a very considerable increase in the demand for visual instruction material, due to the growing interest in educational films and to the numerous requests for assistance from the various war service organizations. The number of organizations using the films and film slides increased during the past year from 172 to 396. These organizations represented some 254 towns and communities in all parts of the Province. Film slide and sound projectors were also loaned to a number of schools and other organizations.

The Department continued to serve as a depository for films from the National Film Society. Close co-operation has been maintained with the National Film Board in the circulation of war information films. Special Air Raid Precautions and Civilian Defence films have been widely circulated in co-operation with the Provincial Civilian Protection Committee.

To bring its visual instruction services to the attention of the general public, four programmes of educational films were presented to the public in the University Auditorium. In almost every case, the films were shown to capacity audiences.

As in previous years, a photographic service was provided for the benefit of University departments.

Educational Programme in Co-operation.

Although a number of new problems had to be faced this year, the educational programme for British Columbia fishermen developed very satisfactorily during 1941-42. Owing to the reduction in the grant from the Dominion Department of Fisheries, it was necessary to reduce the staff from three field workers to one. However, the fishing community continues to give very widespread support to the programme and, as a result, it has been possible to accomplish a great deal of worthwhile work.

A considerable amount of new study material was prepared during the year. This included "The Co-operative Buying Club," a series of five bulletins, and "A Course for Credit Union Treasurers," based on lectures given in an evening class offered in Vancouver during the past winter. The courses prepared for use of study groups in the previous year were also used this year by the Extension Departments of St. Francis Xavier, Alberta and Saskatchewan Universities. Material was assembled for use in the preparation of a pamphlet dealing with co-operative achievements and possibilities in the fishing industry of British Columbia. A "Co-op News Letter" was issued periodically by the Department, and proved valuable in maintaining contact with the widely scattered groups along the Coast.

Two trips were made to the northern communities, where, as in the past, the field worker maintained close contact with the Prince Rupert Fishermen's Co-operative Association. Particular assistance was given to the community of Massett, where a clam cannery was organized on a co-operative basis, and completed a successful year's operation. As well as the direct economic advantages resulting from this new venture, the educational programme has helped to bring

to Massett a greater unity and sense of community co-operation than has existed heretofore.

A number of trips were made to Gulf and Vancouver Island communities where considerable assistance was given to existing credit unions and co-operative societies, and several new organizations were formed. In the Vancouver area, the field worker was in close contact with the United Fishermen's Federal Union. During the year, this organization decided to enter the field of co-operative liver processing.

Whether it is estimated by its material accomplishments or by its effect on the morale of the fishing population, the programme is clearly contributing in a very real way to the war effort of the maritime areas of British Columbia.

During the break in the programme which has occurred each year between the expiration of the grant on March 31st and notice of its renewal later in the summer, a lecture tour was arranged for Mr. Arthur Wirick covering those communities which had shown a particular interest in the co-operative movement. Twenty-four meetings were held. Mr. Wirick reported a widespread interest in the co-operative movement and a need for a regular co-operative educational programme in rural British Columbia.

Study Groups.

As in previous years, the Department has endeavoured to give every assistance to those wishing to organize for group study and discussion. It has been considered increasingly important to encourage this type of adult education at the present time. The study group procedure stresses the value of individual initiative in seeking knowledge, and a spirit of group co-operation in pooling ideas. There is no better training for more effective democratic citizenship.

Several new study group courses were prepared and have proved to be very valuable additions to the Department's study group programme. The course in Child Psychology, prepared during the previous summer at the request of the Parent-Teacher Federation of British Columbia, proved particularly popular, with some sixty-four groups registered in all parts of the Province. A course in Public Speaking met the need for instruction in this field, particularly among young people. "An Introduction to Navigation" was prepared on the basis of the evening class lectures given to Vancouver fishermen. "The Co-operative Buying Club" and "Acting for Juniors" have already been described. During the summer of 1942, plans were drafted for three more courses, entitled "Music Appreciation," "Art Appreciation" and "Community Clinic" (an introduction to Sociology). They will be available for use during the fall and winter of 1942-43.

As in the previous year, courses were offered in "British Columbia History," "Modern Literature," "Practical Psychology," "An Introduction to the Co-operative Movement," "Credit Unions," "Acting," and "Playwriting."

Co-operation with Other Organizations.

An increasingly important feature of the Department's work has been its policy of co-operating with other organizations and assisting them with their own educational work. With a limited staff, it is felt that the Department can contribute most effectively by helping other groups which are endeavouring to establish adult education programmes. It is impossible to describe all instances of such assistance, but reference may be made to the following:

A series of public lectures was arranged for each of the following groups: the Grandview Y.W.C.A., the Victoria Extension Association, Alexandra Neighbourhood House, and the B.C.Optometric Association. Special courses were arranged at the request of the Canadian Credit Men's Association, the United Fishermen's Federal Union, the American Society for Metals, the North Vancouver Horticultural Society, and the B.C.Credit Union League. As has been indicated throughout the report, numerous government agencies have called on the Department for co-operation. These have included the Dominion Department of Labour, the Wartime Prices and Trade Board, the National Film Board, and the Canadian Broadcasting Corporation. Many war service organizations, including the Canadian Legion War Services, have called on the Department for assistance in their work.

Radio Technicians' Course.

At the request of the Department of National Defense for Air and in co-operation with the Departments of Electrical Engineering and Physics, the Department of University Extension has been conducting classes in Radio Mechanics for enlisted personnel of the R.C.A.F. The course, which is of seventeen weeks' duration, provides the fundamental training required for men engaged in operational and maintenance work with the Radio Locator. Approximately ninety men are posted to each course. From June, 1941, to August, 1942, four courses have been held.

Public Relations.

The Department continues to regard its public relations work as a by-product of its general programme of adult education. No specific publicity programme is carried on. However, it is safe to say that the standing of the University in the community has been very greatly enhanced as a result of its policy of placing its resources at the service of the public through an adult education programme.

As in the past, the Department has sent to the newspapers of the Province not only the results of the sessional examinations but other items of interest concerning the work of the University. Particular stress, wherever possible, is placed on the contribution the University is making to the nation's war effort.

Acknowledgements.

A brief examination of the statistical summary which follows will indicate the extent of the work carried on during the past year. This could not have been accomplished without the co-operation of many individuals and organizations. It is a particular pleasure to acknowledge the helpful advice and encouragement received from the President and the Board of Governors, the generous support and assistance given by the members of the University teaching staff, and the loyal and efficient service rendered by the very much over-worked staff of the Department.

Statistical Summary.

	1940-41	1941-42
Outside Lectures Given by Members of the University Staff:		
Number	351	344
Attendance	49,670	33,942
Radio Addresses	--	19
Evening Classes:		
Number	8	13
Total Registration	365	786
Study Groups:		
Number of Registered Study Groups	199	259
Number of Farm Forum Listening Groups and Individuals	--	184
Extension Library Circulation:		
Books	1,775	1,833
Plays	5,442	5,606
Phonograph Record Loan Service:		
Number of Registered Groups	--	32
Drama and Radio:		
Number of Registered Drama Groups	88	138
Short Drama Courses	4	--
Visits to Out-of-Town Drama Groups	--	9
Summer Course in Radio Script Writing (attendance)	36	28
Visual Instruction Services:		
Circulation:		
Motion Picture Films (reels)	5,387	5,929
Sets of Film Slides	1,821	1,722
Sets of Lantern Slides	75	101
Attendance:		
Motion Picture Showings	153,580	400,141
Film Slide & Lantern Slide Showings	50,850	65,013

	1940-41	1941-42
Visual Instruction Services (Continued)		
Number of organizations using the service.....	172	396
Number of towns and communities in which material was used.....	223	254
National Information Circuit (Okanagan) Total Attendance.....	--	46,314
Educational Programme for B.C.Fishermen:		
Number of Communities Visited.....	42	36
Number of Meetings Held.....	188	63
Attendance at Meetings.....	6,368	2,100
Number of Study Clubs Organized.....	111	43
Dominion-Provincial Youth Training Programme:		
Two and Three Weeks' Schools.....	19	4
Total Attendance.....	612	111

Respectfully submitted

GORDON M. SHRUM,

Director of University Extension.

REPORT OF THE DIRECTOR OF THE UNIVERSITY HEALTH SERVICE

(SUMMARY)

The maintenance of health is a matter of national importance. The health of a community determines its ability to give a full measure of support to the war effort. Young people of military age are at the present time the most important group in our community, and concerted effort is essential to promote their well being.

The University Health Service has recognized its responsibility in this regard and the health programme has been expanded to include a careful check on student absenteeism, advice to students on health problems, and treatment for remedial defects. Compulsory military training demands a high degree of physical efficiency, and our Office has worked in close harmony with the Medical Officer of the Canadian Officers' Training Corps.

The reciprocal arrangement whereby male students on entrance to University are examined by the Medical Officers of the Canadian Officers' Training Corps has worked out satisfactorily. The military examination of male students is acceptable for University entrance and conforms in general to our requirements. The Military Officers were kind enough to enter the results of physical examinations on the Student's University Medical Card, and our Office assisted in various parts of the examination, such as the taking of blood pressures and urinalysis. In addition, various laboratory tests were performed, including Tuberculin Testing and arranging for Chest X-ray. Quarters and equipment were shared. Male students absent during the term because of illness or injury, and those desiring temporary exemption for these causes, were checked by the Public Health Nurse and recommendations for the same were made to the Medical Officer of the Canadian Officers' Training Corps. Necessarily this meant extra work, which was reflected in a total of 10,617 student visits to the office, an increase of 1,861 over the preceding year. Altogether, 3,940 individuals reported to the office.

The number of students examined at the beginning of the term was 1038, a new high. Of these, 687 received the combined Military and University examination performed by military examiners. This figure includes a number of women specially examined for participation in athletics, repeat examinations of students not examined within four years, and also sixteen members of the Cafeteria staff who receive a yearly examination.

Altogether, 38 per cent. of the students showed defects which required correction or further investigation. In addition, 11 per cent. were asked to report concerning vaccination. This figure is high and indicates the need for periodic health examination in a general scheme of education and beyond, for the young people of today are the parents and citizens of tomorrow and neglected health is bound to impair the intelligent functioning of society. Again, the mere finding of defects is not enough.

Unless amplified by health education and the means for amelioration, together with a word of encouragement, such examinations and noting of defects are useless. We have tried to amplify the initial examination of students in this respect, with emphasis on positive health rather than the negative side which allows of medical attention only when disability has developed. However, the general student health was found to be fairly good, as was evidenced by the recommendation that 78 per cent. of the female students could participate in strenuous exercise and competitive games. Male students were classified in a different manner by the military examiners, although it is safe to assume that the percentage figures for physical capacity for exercise is similar.

Fortunately, no serious epidemic of communicable disease occurred during the year. A small epidemic of mumps developed during the winter months, the peak being reached in February. Altogether 42 cases were reported, an attack rate of 3.5 per cent. of the susceptible University population. Susceptibility is determined by the absence of a previous history of the disease. The greatest concentration of cases, (40 per cent.) occurred among students of Second Year Applied Science, Section A. Altogether, 35 per cent. of susceptible students in this group developed mumps. Fortunately, progress of the disease was checked among other groups. Students are urged to report when not feeling well, or, if ill at home, to call a doctor. Due to the increased incidence of Scarlet Fever in the Vancouver Metropolitan Area, some concern was felt regarding its spread at the University. However, but four cases developed. Contacts were carefully watched.

Colds and sore throats accounted for most office visits and absence due to illness. Approximately 82 per cent. of office visits concerning communicable diseases were for colds and sore throats. Daily lists of students reporting illness were submitted to the Medical Officer of the Canadian Officers' Training Corps with recommendations respecting absence from parade and physical training.

Due to the prevalence of Acute Poliomyelitis and Epidemic Encephalitis in the Prairie Provinces and the eastern part of British Columbia during the summer of 1941, students arriving from affected areas were asked to report to the Health Office. Altogether, 110 students reported. This was a precautionary measure designed to prevent the spread of these diseases among the University population. Students were advised concerning premonitory symptoms and what to do should such arise. Fortunately, no cases developed. These students were kept under observation for two weeks.

The students are availing themselves more and more of the privilege of coming to the office for advice on health matters. The increasing number of visits is a gratifying reflection of the students' attitude toward health, not necessarily from a personal point of view, but also in a broader sense, the problems of community health, which we are at all times glad to discuss with them.

During the year 29 students attended for interviews with the psychiatrist. Twenty-six came for discussion of personality problems, two for advice primarily connected with their careers, and one sought help for a relative. The majority were seen for one interview only but some students attended on several occasions and the total number of interviews given was 39.

During the medical examinations given to new students, a general enquiry was made for personality difficulties and, as a result of this enquiry, sixteen students were referred to the psychiatrist for discussion of their problems. Ten students were also referred by the army medical authorities for consideration of their fitness, on psychiatric grounds, to continue military training. In these cases a confidential report was sent to the Army Medical Officer.

Amongst the students interviewed a few cases of definite psychiatric and neurological disorder were discovered. One case of acute schizophrenia was seen, one with a history of a recent schizophrenic breakdown, and three showing symptoms of schizoid type of personality. Two cases of idiopathic epilepsy and one of migraine were diagnosed and referred for appropriate treatment. Ten students were found to be suffering from psychoneurotic symptoms of various types which handicapped them to different degrees. The remaining eight showed only minor signs of maladjustment, usually connected with family or personal difficulties.

The results obtained in this work are difficult to assess accurately, but a general idea can be given by the following figures. Twelve students were undoubtedly helped in understanding and solving their personality difficulties. Seven were found to be suffering from more difficult or serious symptoms and were referred for treatment. The remaining seven presented various problems, environmental or constitutional, which prevented the possibility of constructive help.

Psychiatric work in a group of intelligent young adults is most interesting and hopeful. Many of the personality problems which handicap a not inconsiderable number of university students could be modified quite rapidly if sufficient skilled assistance were available. Reports from a number of universities which provide such a service confirm this opinion. This help is not only needed for students showing ominous symptoms of approaching breakdown, but for many others whose personality problems interfere with their ability to study satisfactorily or to adjust themselves to the community.

Such a department should not, in the students' opinion, be connected with "mental abnormality" but should be regarded as providing a simple opportunity for the discussion of any personal difficulties. Students should be accepted for an interview at their own request, through advice from members of the university faculty, or from the health service.

The time at present available for work at the University of British Columbia is too limited to do more than touch the surface of mental hygiene problems. However, a nucleus is provided around which a great extension of the work could be built up in the future.

A very important part of our programme is the tuberculin survey of new students and the X-ray of those found positive. This

programme extends throughout the entire year and many repeat tests and examinations are performed.

Six new cases of Tuberculosis were discovered this year. Three were Minimal Active and the remainder were Minimal Apparently Arrested. One case is being closely followed as a suspect, and 29 others were under observation. However, nine of the latter group have been discharged from this category. Six other cases of Tuberculosis were under continuous observation during the year.

It is felt that the initial programme of tuberculin testing and Chest X-ray, followed by continuous observation of all cases whose physical condition permits them to attend University, has worked very satisfactorily in preventing the spread of Tuberculosis among University students. The majority of cases develop the disease following contact of open cases at home, and a history of Tuberculosis in the home necessitates frequent recheck of individual students.

The number of immunizations against communicable disease has notably increased. Altogether 303 individual series of immunizations against Smallpox, Diphtheria, Scarlet Fever and Typhoid Fever were given, an increase of 343 per cent. over last year.

Students of the Departments of Nursing and Health and of Bacteriology and Preventive Medicine were among the largest groups requesting immunization. At the request of the Department of Bacteriology and Preventive Medicine, students entering upon Bacteriological studies were immunized against Typhoid Fever -- a worthwhile preventive procedure. During war time especially, the necessity for specific protection against communicable disease gains importance and it is gratifying to note the response to this service.

The scope of Health Education has enlarged this year. Members of the staff of the Metropolitan Health Committee were invited to participate in the Health Lectures given to students under the Department of Education. These lectures covered the entire scope of Public Health Services in schools, including Medical, Mental Hygiene, Dental, Nursing and Communicable Disease Control measures, and presented factual information which it is hoped will be of practical use to the prospective teachers. In addition, members of the Provincial Board of Health, Divisions of Tuberculosis Control and Venereal Disease Control participated in this series.

A series of lectures covering Communicable Disease Control and Mental Hygiene was also given, as formerly, to students of the Social Work class of the Department of Economics, Political Science and Sociology.

The Public Health Nurse participated in arrangements governing Air Raid Precautions at the University and the Health

Service has canvassed the Faculty and Staff members regarding participation in First Aid procedures. A considerable number of the staff signified their willingness to serve.

The Health Service functions only through co-operative effort. The professional members of the Metropolitan Health Committee assisted during the initial examinations and in various activities at other times during the year. The Divisions of the Provincial Board of Health, namely Tuberculosis Control, Venereal Disease Control, and Laboratories, assisted wholeheartedly in the programme, both in a practical and an advisory capacity.

The Faculty and Staff members of the various Departments of the University have, through their interest and co-operation, assisted in many ways.

Respectfully submitted,

J. S. KITCHING

Director, University Health Service

REPORT OF THE INSTRUCTOR IN PHYSICAL EDUCATION FOR MEN

Military Physical Education.

The army physical training programme for the session 1941-42 was conducted by student instructors under the supervision of the University Instructor in Physical Education for Men. Nine hundred men taking basic military training were required to take two periods per week. This requirement was met in eighteen periods scheduled in the gymnasium.

Although the lack of a trained staff in Physical Education was keenly felt, some of the student instructors proved to be exceptionally capable. A required programme in Physical Education would, of course, make the selecting and training of student assistants a much simpler task.

Activity Classes.

Voluntary classes in Physical Education are becoming increasingly difficult to arrange because of the heavy academic and military load carried by the students, the lack of time and space to schedule such activities, and the increased administrative duties of the Instructor in Physical Education. Some instruction was given in basketball, boxing, tumbling and golf.

Intramural Programme.

During the past session the old system of inter-class competition was abandoned and intramural sports were organized on an inter-club basis. This programme was put into effect in January, 1942, and was thoroughly successful.

The short season from January to March included eight sports in which over three hundred men participated in a total of 184 matches. These three hundred men participated a total of 1,498 times in one or more of the eight sports. The average participation per man was five times during the winter term.

It is anticipated that the total number participating during the session 1942-43 will exceed six hundred.

Standard of Physical Education.

If the University wishes to continue the above-mentioned activities and to raise its standard in Physical Education to university level, it is imperative that a fully qualified assistant in Physical Education be engaged. Since over twelve hundred men are taking part in some type of Physical Education, it is hardly conceivable that one man can efficiently organize and administer a programme in Physical Education which will effectively serve such a large group.

Respectfully submitted,

M. L. VAN VLIET,

Instructor in Physical Education for Men.

REPORT OF THE INSTRUCTOR IN PHYSICAL EDUCATION FOR WOMEN

Registration.

The registration for Physical Education activities for women in the Session 1941-42 was approximately 500.

Programme.

Activities which received the greatest support during the session were the keep-fit classes and the intramural sports. This demonstrated clearly two facts: the need of the women for physical exercise, and their desire for organized sports.

(a) Classes.

Gymnasium class material included informal talks on posture with related keep-fit exercises. Tumbling, light apparatus and group games were also taught in these periods.

Dancing class material consisted of fundamental rhythms using balls, ropes and single sticks; and folk, national and tap dancing.

Classes were conducted in archery, badminton, tennekoit, ping-pong, volleyball, and lead-up games for the various sports.

A class in Recreational Leadership was given. The course covered the theory of play and play leadership and material to be used in all types of recreational activity. There was also practice teaching of these activities.

(b) Sports.

This year the weather prevented the Women's Archery Team from competing in the Intercollegiate Archery Tournament.

National Defence Regulations made it impracticable for the Guest Tournament with Western Washington College to be held.

(c) Intramurals.

One of the most successful programmes in intramural sports yet conducted was carried out this year. Tournaments were organized for women's class teams in volleyball, badminton, tennekoit, ping-pong and archery. Eight teams competed, representing first, second, third and fourth year Arts and Science, Agriculture, Commerce, Teacher Training Course and Nursing and Health. Tournaments were played by mixed teams also.

(d) Teacher Training Course.

The Teacher Training Course students were given instruction in various activities suitable for the school Physical Education programme.

The Instructor in Physical Education for Women assisted in:-

The management of the affairs of the Women's Athletic Directorate.

The directing of the intramural programme.

The promotion of interest in winning athletic awards.

The giving of co-operation and counsel in all activities of the Women's Athletic Association.

The interviewing of students in regard to personal health problems.

The giving of suggestions and material to students teaching recreation and physical education activities.

The discussion of matters concerning professional standards and opportunities in Physical Education and Recreation.

The need for development and extension of the physical education programme for women has become acute. It is hoped that the increasing demand for women in war work will stimulate action to provide some means of extending and developing the programme for the women. Such a programme would be a contributing factor to the health of the women in this period of war strain. Also, in a secondary manner, it would prove beneficial in that the women would be provided with a greater opportunity for participating in an activity which by its continued practice in leisure time would be conducive to health after graduation.

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. General.

This report covers the military activities at the University during the third year of the war. As in the preceding year, all physically fit male students were required to devote six hours per week to military training. In general the students have shown a greater interest in the training and a more serious attitude in regard to the war. This has been reflected in the increased number of voluntary enlistments for active service. The events which followed the attack on Pearl Harbour on December 7th, 1941 brought British Columbia into the military operational zone, and this placed greater responsibilities upon the Corps in the matter of preparedness and efficiency of training.

During the year 415 members left the Unit to go on Active Service. Of these, 43 joined the Navy, 173 the Army, and 199 the R.C.A.F.

During the year 462 students were called for training under the National Resources Mobilization Act. All of these men received postponements on condition that their training with the C.O.T.C. was satisfactory.

2. Training.

The maximum strength of the Unit during the period, namely, 1879, constituted an all-time record. This figure includes many graduates and some Summer Session students of the preceding year. The actual training strength during the year varied but was approximately 1500 all ranks.

The men were divided into groups as follows:

Group R-1	-	First Year Basic Training
Group C-1	-	First Year C.O.T.C. Training
Group R-2	-	Second Year Basic Training
Group C-2	-	Second Year C.O.T.C. Training
Group C-3	-	Third Year C.O.T.C. Training

The syllabus of training followed was that required by National Defence Headquarters.

The greater part of the practical training was given on Saturday afternoons. Men who were unable to attend at this time did their drill and practical work in the evening under the flood-lights until November 22nd and thereafter in the Armoury. Lectures were arranged in one-hour periods to suit the convenience of the students.

Men were prepared for the written examinations Syllabus A, B, and C.

3. Camp.

The annual Camp was held at Vernon from April 29th to May 12th, 1942. Arrangements were made by National Defence Headquarters to grant leave from camp to men who were to be employed in essential industries. Under this plan leave was granted to 228 all ranks. In all, 541 men attended the two weeks' camp training. The Unit was responsible for the administration of the camp and the Commanding Officer acted as Camp Commandant.

4. Staff.

The following full-time staff was attached to the Unit for the training period:

Training.

2 officer instructors
4 N.C.O's assistant instructors

Administration

1 Adjutant
1 Quartermaster Sergeant
1 Orderly Room Sergeant
4 Clerks

5. Armoury.

The most outstanding event of the year was the construction of the Armoury. This building was officially opened by the Lieutenant-Governor on November 22nd, 1941. Although the space provided is inadequate to house all stores and training equipment, it does make it possible to centralize the activities of the Unit. It is now possible to arrange training schedules so that all evening practical periods can be held indoors.

Although additional funds have been provided for the construction of a much-needed extension to the building, this has not as yet been possible owing to problems of priority on materials.

6. Acknowledgements.

The Commanding Officer wishes to record his thanks and appreciation for the assistance and co-operation afforded him by the Chancellor, the General Officer Commanding Pacific Command, the President, the Board of Governors, the Committee on Military Education, the Faculty Council, the General Staff Pacific Command, the Officer Commanding Vancouver Defences, the Administrative and Training Staff, and finally the officers and cadets of the Unit.

Respectfully submitted,

G. M. SHRUM

(G. M. Shrum) M.M. Lt.-Col.,
Officer Commanding,
U.B.C.Contingent, C.O.T.C.

PUBLICATIONS

FACULTY OF ARTS AND SCIENCE

Department of Bacteriology and Preventive Medicine

DOLMAN, C.E.
The changing place of the laboratory in public health Canadian public health journal 33:185-97 May 1942.

DOLMAN, C.E., Kerr, D.E. and Helmer, D.E.
A new phage and a susceptible W form of S typhi isolated from a typhoid fever case. Canadian public health journal 32:113-9 March 1941.

DOLMAN, C.E.
Staphylococcus enterotoxin. Pacific science congress, 6th Berkeley, Calif., 1939. Proceedings 5:363-8 1942.

Abstract: E. Kuitunen-Ekbaum. Phenothiazine in the treatment of enterobiasis. Canadian public health journal 32:308-13 June 1941. Biological abstracts 15:24519 December 1941.

Abstract: L. Greenberg. Single colony isolation of anaerobes. Canadian public health journal 32:314-6 June 1941. Biological abstracts 15:24098 December 1941.

Abstract: Laurella McClelland and Ronald Hare. The adsorption of influenza virus by red cells and a new in vitro method of measuring antibodies for influenza virus. Canadian public health journal 32:530-8 October 1941.

DUFF, C.B.
The oral immunization of trout against bacterium salmonicida. Journal of immunology 44:87-94 May 1942.

Department of Biology and Botany

HUTCHINSON, A.H. and Farley, H.M.
Seed development in medicago (alfalfa) hybrids, I The normal ovule. Canadian journal of research 19 C:421-37 November 1941.

ALLARDYCE, John and Milsom, Douglas
Carotene in feed grasses. Canadian journal of research 20 C:85-8 February 1942.

Department of Chemistry

SEYER, W.F. and Leslie, J.D.
The viscosity of cis and trans decahydronaphthalene. American chemical society. Journal. 64:1912-16 August 1942.

Department of Classics

TODD, O.J.
Aristotle's politics, IV, xii,11-13; text and interpretation. American journal of philology 62:416-25 October 1941.

Caesura rediviva. Classical philology 37:22-37 January 1942.

Sense and sound in classical poetry. Classical quarterly 36:29-39 January 1942.

MACKAY, L.A.
Notes on Horace (Odes I, i,1; Epistles, I,i,38) Classical philology 37:79-81 January 1942.

RIDDEHOUGH, G.B.
William Morris's translation of the Odyssey. Journal of English and Germanic philology 40:558-61 October 1941.

Department of Commerce

CURRIE, A.W.
Canadian-American economic relations in the present war. Pacific coast economic association. Proceedings, 1941. 20:48-52 1942.

Canadian economic development. Toronto, Nelson, 1942. v, 386 pp.

Review: Richard Finnie. Canada moves north. Pacific northwest quarterly 23:364-5 July 1942.

Department of Education

CAMERON, M.A.
The administration of education in Ontario. (Revision by A.C.Lewis) Toronto, 1942. 46 pp. (Toronto. University. Department of educational research. Educational series no.1)

The small high school. School (Secondary edition) 30:25-30 September 1941.

RUSSELL, D.H. and Holmes, F.M.
An experimental comparison of algebraic reading practice and the solving of additional verbal problems in tenth grade algebra. Mathematics teacher 34:347-52 December 1941.

RUSSELL, D.H.
Is your child mentally healthy? Vancouver Sun, Healthy Children, Special supplement p. 2 February 26, 1942.

RUSSELL, D.H. and Tyler, F.T.
Special education in Canada. School (Elementary and secondary editions) 30:882-9 June 1942

Department of Education (Continued)

RUSSELL, D.H.
Subject matter disabilities. School (Elementary and secondary editions) 30:471-5 February 1942.

Voluntary reading and academic achievements in two Canadian high schools. School review 50:112-20 February 1942.

With books and magazines. Understanding the child 11 April 1942.

Department of English

SEDGEWICK, G.G.
Kittredge of Harvard. Dalhousie review 22:81-6 April

Department of Geology and Geography

WILLIAMS, M.Y., Schwartz, C.K. and others
Correlation of silurian formations of North America. Geological society of America. Bulletin 53:533-8 April 1942.

WILLIAMS, M.Y.
Notes on the fauna of Bruce peninsula, Manitoulin and adjacent islands. Canadian field-naturalist 56:60-2, 70-81, 92-3 April, May, September 1942.

Oil in north-eastern British Columbia. Miner 15:30-1 August 1942.

Oil possibilities, north eastern British Columbia. Miner 14:25-7 December 1941.

Progress - planned or improvised. Royal society of Canada Transactions ser 3, 35, sec. 4:151-65 1941.

DAVIS, N.F.G.
Relief features of southern British Columbia. (In Freeman, O.W. and Martin, H.H., eds. The Pacific northwest. New York, Wiley, 1942, pp. 97-103)

WARREN, H.V. and Runkle, J.D.
A mineralogical study of the gold in some Bralorne mill products. Miner 15:30-4 February 1942.

WARREN, H.V. and Ney, Charles
The size and mineralogical distribution of gold particles in a flotation tailing sample, Britannia, B.C. Miner 14:50-4 October 1941.

WARREN, H.V. and Matthews, W.H.
Some notes on a gold-tungsten occurrence in the Bridge River district. Miner 15:31-4 May 1942.

WARREN, H.V. and Lips, Alair
Some notes on mineralogy and the search for Slocan ore Miner 14:28-30 December 1941.

WARREN, H.V.
Articles and annual reviews: Vancouver Daily Province and Financial news.

Department of History

SAGE, W.N.
Review: C.M.Gates, ed. Readings in Pacific northwest history: Washington 1790-1895. British Columbia historical quarterly 6:153-4 April 1942.

Review: Jules LeChevallier, O.M.I. Batoche: les missionaires du nord-ouest pendant les troubles de 1885. Canadian historical review 23-87-8 March 1942.

Review: The relations of Canada and the United States. British Columbia historical quarterly 6:216-25 July 1942.

SOWARD, F.H.
Canadian foreign policy 1919-1939. League of nations society in Canada. News sheet January 1942 p. 8-9.

The fourth climacteric of the second world war. British Columbia. University. Alumni association. Graduate chronicle 4:2-3 May 1942.

Our modern world, 1775-1941. Ottawa, Canadian legion war services, inc. (c1941) (Courses for service men. Social studies C. Text-booklets 1-4)

Sir Robert Borden and Canada's external policy, 1911-1920. Canadian historical association. Annual report 1941:65-82 1941.

Winston Churchill, freedom's champion. Toronto, Oxford university press, 1941. 20 pp.

Review: Virginia Hancock. The purchase of Alaska; contemporary opinion. British Columbia historical quarterly 6:73 January 1942.

Reviews: Other reviews in the Vancouver Daily Province

Assisted in editing section on Canada for the 1942 edition of the annual publication Political handbook of the world.

Department of Mathematics

BUCHANAN, Daniel
Second genus crossed orbits. Canadian journal of research 20 A:11-24 February 1942.

Trojan satellites (limiting case). Royal society of Canada. Transactions ser 3, 35, sec. 3:9-25 1941.

JENNINGS, S.A.
Central chains of ideals in an associative ring. Duke mathematical journal 9:341-55 June 1942.

Department of Modern Languages

CLARK, A.F.B.
The Turk and the French mind. University of Toronto quarterly 11:225-31 January 1942.

HILTON, Ronald, ed.
Handbook of Hispanic source materials and research organizations in the United States. Toronto, University of Toronto press, 1942. xiv, 441 pp.

Department of Philosophy and Psychology

TYLER, F.T. and Russell, D.H.
Special education in Canada. School (Elementary and secondary editions) 30:882-9 June 1942.

Department of Physics

VOLKOFF, G.M.
A note on exchange tensor forces in heavy nuclei. Physical review 62:134-6 August 1942.

Tensor forces and heavy nuclei. Physical review 62:126-33 August 1942.

Department of Zoology

CLEMENS, W.A.
Conservation report for British Columbia. Canadian conservation association. Transactions 1:27-39 1941.

Contributions to the life-history of the sockeye salmon. Paper 27. British Columbia. Department of provincial fisheries. Report 1941:27-44 1942.

COWAN, I. McT.
Fossil and subfossil mammals from the quaternary of British Columbia. Royal society of Canada. Transactions ser 3, 35, sec. 4:39-49 1941.

Termite-eating birds in British Columbia. Auk 59:451 July 1942.

SPENCER, G.J.
Insects and other arthropods in buildings in British Columbia. Entomological society of British Columbia. Proceedings 39:23-9 October 10, 1942.

A note on laelius sp., a parasite of the carpet beetle anthrenus scrophulariae (L.)(Hymenoptera, Bethylidae) Entomological society of British Columbia. Proceedings 39:21-2 October 10, 1942.

A preliminary list of the neuroptera of British Columbia. Entomological society of British Columbia. Proceedings 38:23-8 February 7, 1942.

Department of Zoology (Continued)

SPENCER, G.J. (Continued)
Two unusual larval habitats of tabanids (Diptera) Entomological society of British Columbia. Proceedings 38:10-12 February 7, 1942.

FACULTY OF APPLIED SCIENCE

Department of Mining and Metallurgy

FORWARD, F.A.
Research and the mining industry. Miner 14:39-43 October 1941.

GILLIES, G.A., Lyle, A.G. and Runkle, J.D.
A graphical method for evaluating selective flotation tests. Mining technology 6, 1409:1-12 January 1942 (Technical publication no. 1409)

Department of Nursing and Health

KERR, M.E.
Public health nurses in Canada. Canadian nurse 38:42-3 January 1942.

Department of Mechanical and Electrical Engineering

COULTHARD, W.B.
Operational methods of dealing with circuits excited by sinusoidal impulses. Canadian journal of research 20 A:33-8 April 1942.

THOMSON, D.W., Kratz, A.P. and Konzo, S.
Combustion efficiencies as related to performances of domestic heating plants. Illinois. University. Engineering experiment station. Circular 44:1-30 1942.

FACULTY OF AGRICULTURE

Department of Agricultural Economics

CLEMENT, F.M. and Forshaw, R.P.
A factual survey of the Fraser valley dairy industry and the greater Vancouver fluid milk market, Vancouver, B.C. 1942. 71p. (Mimeographed for associations and official bodies)

Department of Animal Husbandry

BERRY, J.C.
Livestock and dairy farming. Ottawa, Canadian legion war services, inc., (c1942) (Courses for service men. Vocational agriculture. Text-booklets 1,3)

Mating systems used in some leading British Columbia dairy herds. American dairy science association. Western division, Portland, Oregon. Proceedings 27:35-45 October 5, 1941. (Mimeographed)

Department of Poultry Husbandry

BIELY, Jacob, Fisher, Herbert and Inkster, Cameron.
Ineffectiveness of cow urine in the control of eimeria tenella infection in chickens. American journal of veterinary research 3:221-24 April 1942.

BIELY, Jacob
Poultry keeping. Victoria, B.C., Department of education, (1941) (Vocational correspondence courses) (Mimeographed)

BIELY, Jacob, Billings, F.L., Fisher, Herbert and Hedreen, Carl.
The riboflavin content of fish products. Journal of nutrition 22:425-30 October 1941.