

1961

MINUTES of the meeting of the Science Committee held on Wednesday, December 13th, 1961, at 3:00 P.M. in Room 107 Science Building.

## Present

Professors Isaac (Chairman), Dahlstrom, Biermann, Bock, A.N. Campbell, N.E.R. Campbell, Charlesworth, Connor, Cooke, Cothorn, Douglas, Dunn, Funt, Hawirko, Hogg, Houston, Kartzmark, Kelly, Kettner, Lees, McLeod, Neamtan, Ritchie, Rodewald, Schaefer, Sen, Standil, Stewart-Hay, Weisman, Whitmore. (30)

## Report of the Sub-Committee on the General Course Structure

The Chairman reported that the sub-committee restricted itself to a consideration of the General Course structure for students majoring in Science. Their recommendations were made by modifying the existing Dulmage report as shown on the attached sheets. Each of the Dulmage report sections were discussed and voted on separately.

### 1. Honours in Science.

Moved by Prof. Whitmore (seconded Cooke) that the sub-committee amendment be accepted. Carried.

### 2. No General B.Sc. Degree.

Moved by Prof. Kettner (seconded Cooke) that the sub-committee amendment be accepted, i.e. that this section be omitted. Carried.

### 3. Proficiency in English Composition.

The sub-committee made no changes in this section. There was no discussion or vote on it.

### 4. Basic Subjects for a General B.A. Degree.

Moved by Prof. Kelly (seconded Hogg) that the sub-committee amendments be accepted. Carried.

### 5. The Major.

Prof. Whitmore objected to the sub-committee amendment; he thought there should be a definite rule regarding comprehensive examinations. Profs. Weisman and Douglas thought that a comprehensive examination would be a useful final hurdle for weak students. Profs. Neamtan, Lees, and Funt defended the sub-committee amendment. Prof. Funt argued that the comprehensive exam would be difficult to organize for large classes and Prof. Lees thought that the same result would be obtained by the final year course examinations.

Moved by Prof. Kelly (seconded Funt) that the sub-committee amendment be accepted. Carried. (3 opposing)

### 6. Concentration.

This section was unchanged. There was no discussion or vote.

### 7. The Program.

It was agreed that the term course refers to 3 lectures + 1 lab per week or equivalent. Moved by Prof. Cooke (seconded Hogg) that the first sentence be changed to read 'The terms basic subject for the general B.A. degree and major have been defined above.' Carried.

Prof. Whitmore objected to the amendment of item (2) and it was agreed to return to this item later.

Prof. Whitmore thought that item 6(b) was too restrictive in that it required too many Group C courses. Prof. A.N. Campbell supported item 6(b) on the grounds that it provided the desired amount of concentration in science.

Two amendments to 6(b) were proposed:

(i) One major, one minor, and at least one other course must be chosen from Group C (moved by Prof. Whitmore, seconded Kelly).

(ii) One major, one minor, and at least two other courses must be chosen from Group C. (Moved by Prof. Standil, seconded Cooke).

In a recorded vote amendment (i) received 5 votes, amendment (ii) received 5 votes, and item 6(b) received 13 votes.

The item 6(b), unchanged, was carried.

Professors Whitmore and Lees thought that item 7(b) was not sufficiently restrictive in that it allowed too wide a choice of Group A and B subjects.

Moved by Prof. A.N. Campbell (seconded Whitmore) that item 7(b) be amended to read, 'every program must include at least 3 courses chosen from the list of basic subjects for the general B.A. degree, mathematics and science subjects excluded.''. Defeated.

Item 7(b), unchanged, was Carried.

Moved by Prof. Kettner (seconded Kelly) that there be added an option to items 6(b) and 7(b) which would allow a program consisting of one major, one minor, and one other course in Group C subjects, provided the remaining 6 courses were made up of 2 minors from Groups A and B. Defeated.

#### 8. Degree of Difficulty of the Major.

The sub-committee recommended omission of this section. Moved by Prof. Hogg (seconded Cooke) that this be accepted. Carried.

The sub-committee recommended no changes in sections 9, 10, and 11. On a motion by Prof. Standil (seconded Cooke) this was Carried.

Prof. Hogg moved a vote of thanks to the sub-committee.

The meeting adjourned following a motion by Prof. Whitmore (seconded Lees) that the next meeting of Science Committee be held after Christmas. Agreed.

MINUTES of the Science Committee Meeting, Tuesday, December 13th 1961  
at 9:30 a.m.

Present Professors Dunn (Chairman), Kelly, Hogg, Walker, Standil, Coish, Cooke, Douglas, NER Campbell, Gesser, AN Campbell, Charlesworth, Boch, Weismann, Funt Dahlstrom, McLeod, Stewart-Hay, Robinson, Naqvi, Biermann, Loudfoot, Neamtan, Wilson, Brownell, Houston, Brisbin, and Fairweather.

1. The Minutes of the last meeting were approved.
2. The matter of journals in the new Reading Room was raised. Dr. Standing moved that duplication of the journals be abandoned in Physics and that the money thus saved be devoted to obtaining new journals and that all current journals in Physics be moved to the new Reading Room from the main library (sec. Prof. Kelly).

Dr. Funt suggested that the librarian decide which journals be moved.

Dr. AN Campbell proposed an amendment adding 'and Chemistry' after the word 'Physics' in the above motion. (sec. Prof. Boch).

The amendment was lost.

The motion was lost.

Dr. Funt then proposed a letter to the librarian asking that note be taken of the journals in greatest demand and to keep these in duplicate, one in the main and the other in the new Reading Room and that journals in single copy be moved to the new Reading Room within the next year (sec. NER Campbell).

The motion was lost.

Dr. Kelly proposed that as this matter was still under consideration by the library committee (Miss Coddington's letter May 19, 1960) the Secretary be instructed to re-open this matter with Miss Coddington.

This was agreed.

3. The two matters referred by Faculty Council to the committee were then discussed at length. These were (1) the introduction of the Double Sequence in Chemistry and (2) the alternative introduction of a IV G programme in Science.

Dr. Dunn outlined the two proposals in detail and Dr. AN Campbell advanced the reasons favouring the Double Sequence. In particular he was opposed to the IV G programme as it would in effect introduce a 4 year Honours course.

Dr. AN Campbell proposed (sec. Loudfoot) that Double Sequence in Chemistry be approved. This was carried unanimously.

On the motion of Dr. Kelly (sec. Cooke) it was proposed that the IV G programme be not introduced in Science - approved unanimously.

4. Dr. Standil said that an improvement in the general degree was desirable and that there was too large a gap between the general and Honours degrees. Dr. Standil proposed (sec. Hogg) that the Science Committee asks all Science departments to study the general courses and to improve the same.

Dr. Cooke proposed an ammendment that this matter be referred to the Dean's committee on the General Course but there was no seconder. Dr. Standil's motion was carried. The Secretary was instructed to write to the appropriate departments.

5. Dr. Connor pointed out that all the preceeding discussions on items (4) and (5) indicated a wish to stimulate the general course and this had been further indicated by the speeches of Drs. Whitmore and Jones at the recent Faculty Council meeting. He therefore proposed that all courses planned specifically for the General students be abandoned and that there be only one programme of study in each year of every subject. Very little would change in the present 1st and 2nd years of study, but that to enter 3rd year of a subject a merit certificate indicating say 60% in the 2nd year of that subject be demanded. No change at all would be made in the Honours programme but General students would then be taking only honours courses and when they were unable to proceed into the following year of a subject due to poor performance they would be deflected into other subjects.

After outlining the advantages of such a scheme in a general way Dr. Connor proposed that a sub-committee be formed to examine in detail this proposal. (sec. Cooke)

Dr. Biermann wished the committee to review all possible ways of improving the General programme and this adendment (sec. Neamtan) was incorporated in the motion which was then carried.

The chairman was instructed to strike a sub-committee.

6. Adjournment 11:40 a.m.

MINUTES of the meeting of the Science Committee held on Tuesday, December 12th, 1961, at 10:00 a.m. in Room 107 Science Building.

Present

Professors Isaac (Chairman), Dahlstrom, Biermann, Brownell, N.R.R. Campbell, Charlesworth, Coish, Connor, Cooke, Cothern, Douglas, Dunn, Funt, Hawirko, Hogg, Houston, Kelly, Lees, McLeod, Neamtan, Robinson, Roulston, Sen, Standil, Standing, Stewart-Hay, Walker, Waygood, Weisman, Whitmore. (30).

Continuation of Discussion on the General Course Structure

The Chairman reported a conversation with the Dean indicating that it would be in order for the Science Committee to present a motion on the subject of the General Course Structure to the Arts and Science Faculty Council.

The Chairman obtained agreement from members that discussion should first be limited to the Dulmage report as it affects students majoring in Science. The following are headings taken from the Dulmage report in the order in which they were discussed.

- (a) No General B.Sc. Degree. Moved by Prof. Whitmore (seconded Connor) that this committee recommends retention of the B.Sc. degree for those students majoring in Science. Carried unanimously.
- (b) Proficiency in English Composition. Prof. Connor suggested, and agreed to bring up in Faculty Council, that the idea of remedial classes be extended to subjects other than English, for example arithmetic.
- (c) Honours in Science. Some members expressed concern with the wording of this paragraph.
- (d) The Basic Subjects. Prof. Neamtan suggested removal of the category of Basic Subjects since the choice of these depend on the particular course taken by the student. Prof. Connor suggested the present separate subjects of French, German, and Russian should be lumped together as Modern Languages.

Prof. Standing (seconded Neamtan) moved that the list of basic subjects presented in the Dulmage report be discarded and that a committee or committees be formed to draw up course programs leading to the B.Sc. degree. This motion was later withdrawn.

Prof. Dunn stated that, since the Science Committee had moved to retain the B.Sc. degree, it had effectively rejected the remainder of the Dulmage report as it pertains to the Sciences, and that now a new report should be written for the B.Sc. degree.

At this point there was a general feeling that very little useful was being accomplished in the discussion.

Moved by Professor Cooke (seconded Kelly) that a sub-committee be formed to examine the Dulmage report and to bring recommendations to the next meeting of the Science Committee. Carried.

Chosen as members of the sub-committee were Professors Brownell, Cooke, Funt, Isaac, Lees and Neamtan.

The Meeting adjourned about 12 Noon after instructing the sub-committee to report back to the Science Committee at 3:00 p.m. Wed., Dec. 13th.

MINUTES of the meeting of the Science Committee held on Monday, December 11th, 1961, at 10:00 a.m. in Room 107 Science Building.

### Present

Professors Isaac (Chairman), Dahlstrom, Biermann, Brownell, Coish, A.N.Campbell, N.E.R.Campbell, Connor, Cooke, Charlesworth, Douglas, Dunn, Funt, Hawirko, Hogg, Johnson, Kartzmark, Kelly, Kettner, Lees, McLeod, Mendelsohn, Neamtan, Ritchie, Robinson, Roulston, Sen, Standil, Stewart-Hay, Walker, Waygood, Weisman, Whitmore and Wilson. (34).

1. The Minutes of the previous meeting were read and approved.

### 2. Science Reading Room.

(a) The Chairman reported that Mr. Abdulah had received a request that stack permit holders be allowed to use the staff side of Reading Room. Since this was an isolated case Mr. Abdulah asked, and the Chairman agreed, that he be allowed to continue his present practice. Under this scheme, undergraduate students may use the staff side when the student portion is filled and/or at the discretion of Mr. Abdulah. Prof. Standil stated that honours students should have access to the journals and Prof. Connor suggested that in such cases the student could obtain a note from the appropriate staff member.

(b) The Chairman summarized a letter from Mr. Foley indicating that the majority of the Science periodicals requested are now on display in the Reading Room. On a motion by Prof. Whitmore (seconded Kelly) it was decided that any further action on journals requested but not yet transferred should be up to the department concerned.

### 3. Accident Insurance Scheme for Graduate Students

The Chairman explained that the request for such a plan had originated with the Faculty of Graduate Studies and that the Secretary of the Science Committee had started to obtain information from other Universities already having such schemes.

Prof. A. N. Campbell moved (seconded Lees) that this committee go on record as being strongly in favour of a graduate student accident plan and that immediate action be taken to obtain such a plan. Carried.

The main points brought out on discussion were as follows

- (a) There should be adequate coverage for serious injury, preferably open at the top.
- (b) The premiums for such a plan should be paid by the University. Such a plan would be an advantage to the University in that it would prevent damage suits brought against the University by injured students.
- (c) A committee, including some people competent in the insurance field, should be set up to study the matter.

The Chairman (in consultation with the Dean of Graduate Studies) was asked to strike a committee to study and recommend an accident insurance plan for graduate students.

#### 4. Grade XII Biology

Prof. Stewart-Hay eloquently presented reasons for not accepting Grade XII Biology for University entrance. The discussion which followed indicated general agreement with his views.

Prof. Stewart-Hay (seconded A.N.Campbell) moved that the present University entrance regulations be maintained. Carried.

There was general dissatisfaction with the standard of other high school science courses as well as Biology. The low standard of these courses was attributed partly to the text books being used and partly to the quality of the high school science teachers. There seemed to be general agreement that the University should have a larger part in the design and control of the high school curriculum.

Prof. A. N. Campbell (seconded N.E.R.Campbell) moved that this Committee request a meeting of the Arts and Science Faculty Council to discuss the idea of increased University participation in that part of the high school curriculum which is designed for University entrance. Agreed.

#### 5. General Course Structure

The Chairman communicated some of the views of the Dean on the subject of revision of the General Course Structure. Prof. Neamtan pointed out that the procedural rules do not appear to allow the Science Committee to present a formal motion on the subject to the Arts and Science Faculty Council. This question was not settled. Prof. Neamtan thought that the Dulmage report would require such significant changes that it would be better to write an entirely new report. He suggested the Saskatchewan 'channel' system as a possible alternative. Professors Funt and Cooke disagreed with the idea that the Dulmage report should be discarded and Prof. Cooke proposed several amendments to the report. Prof. Dunn attempted to give some background material which determined the present form of the Dulmage report.

The meeting adjourned at 12:00 Noon after agreeing to continue the discussion at 10:00 a.m. the following day.



Science Committee

There will be a meeting of the Science Committee in Room ~~111~~<sup>107</sup>,  
~~Ames Lecture~~<sup>SCIENCE</sup> Building at 10:00 A.M. on Monday, 11th December,  
1961.

Agenda

1. Minutes.
  2. Business arising out of the Minutes.
  3. Regulations regarding use of the Science Reading Room.
  4. Proposed accident insurance scheme for graduate students.
  5. Discussion of the acceptability of Biology for University entrance.
  6. Discussion of the General Course Structure. → *Continued*  
(1) 10:00 A.M. Tues. Dec. 12/61  
107 SCIENCE.
  7. Other business.
  8. Adjournment.
- (2) 3:00 P.M. Wed. Dec 13/61  
107 Science.

C. E. Dahlstrom

Secretary

SCIENCE COMMITTEE

BOTANY

Waygood, E. R.  
Isaac, P. K.  
Barker, G.

Walker, Miss J.  
Ritchie, J. C.  
Irvine, B.

CHEMISTRY

Campbell, A. N.  
Bock, E.  
Charlesworth, E. H.  
Dunn, G. E.  
Funt, B. L.

Kartzmark, E. M.  
Loudfoot, J. H.  
Robinson, A. D.  
Gesser, H. D.  
McBride, D. W.

Westmore, J. B.  
Wagemann, R.  
Jagroop, C. L.  
H. M. Hutton

GEOLOGY

Brownell, G. M.  
Brisbin, W. C.  
Ferguson, R. B.

Leith, E. I.  
Russell, G. A.  
Wilson, H. D. B.  
Hall, D. H.

MATHEMATICS

Lawson, J. W.  
Black, D.  
Dowling, R.  
Froese, J.  
Johnson, Miss D.

Lockhart, R. J.  
Mendelsohn, N. S.  
Moser, W. O.  
Muldrew, A.  
McEwen, W. H.

Swirles, J.  
Zeiler, F.  
Finlayson, H.  
Jonsson, W.  
Prendergast, H. B.  
Armstrong, K.

MICROBIOLOGY

Lees, H.  
Campbell, N. E. R.

Halvorson, H.  
Hawirko, R. Z.

Sanwal, B. D.  
Suzuki, I.

PHYSICS

Whitmore, B. G.  
Connor, R. D.  
Cooke, I.  
Cothern, C. R.  
Douglas, D. G.  
Neamtan, S. M.  
Coish, H. R.

Hogg, B. G.  
Kettner, M. E.  
Roulston, K. I.  
Sen, S. K.  
Standil, S.  
Vail, J. M.  
Morrish, A. H.

Standing, K. G.  
Hird, B.  
Fujimoto, M.  
Warner, R. E.  
Bukata, R. P.  
Kelly, F. M.  
Oretzki, M. J.

ZOOLOGY

McLeod, J. A.  
Lubinsky, G. A.

Weisman, H.  
Garside, E. T.

Ward, F. J.  
Day, M. G.

Dean of Arts and Science - Sibley, W. M.  
President - H. H. Saunderson

Asst. to Dean of Arts & Science - R. J. Lockhart

MINUTES of the Meeting of the Science Committee held on Monday,  
3rd April at 4 P.M. 1961 ?

PRESENT: Profs. Dunn (Chairman), Connor, Charlesworth, Isaac, Coish, Dahlstrom, NER Campbell, AN Campbell, Schaffer, Rodeward, Waygood, Whitmore, Neamtan, Kettner, Fairweather, Standil, Kelly, Cooke, Standing, Wiseman, McLeod, Funt and Stewart-Hay.

1. The Minutes of the previous meeting were read and approved.
2. The discussion on the teaching of the General course to graduation was resumed. Prof. Dunn read 7 points as a foreword to the motion of Drs. Funt and McLeod. Dr. Whitmore said some colleagues have reasons for wanting to teach to this level and that he was moving away from his previous position. He feared that standards would be depressed with college participation.

Dr. AN Campbell moved that the motion be as on the attached sheet and that this be reported to the next Faculty Council meeting and presented for adoption. This was carried unanimously.

3. Report on the General Course. Dr. Connor outlined the main points and moved the report be ~~revised~~ <sup>received</sup> (sec. McLeod).

Dr. Neamtan wished to separate the points proposal from that relating to the Group A subject. Dr. AN Campbell pointed out that much of our trouble originated in low entrance requirements and moved that entry into Arts and Science from Grade XI or XII be at a level of 60% or better.

Dr. Cooke proposed the bringing of Arts and Science into line with other Faculties by requiring for entrance a mark of at least 60% in the High School examinations (sec. Kelly). This was carried unanimously.

A lengthy discussion took place on the points plan ending with the proposal that the Science Committee should support the point plan of Dr. Whitmore's committee with the amendment that at least two merit points be obtained in each year of study. This was carried unanimously. The matter of dropping the Group A subject ~~to~~ <sup>and</sup> substituting another Group C subject was carried 9/5 ~~on~~ the motion of Prof. Kelly (sec. McLeod).

The Calendar amendment allowing general students to take honours courses was carried on the motion of Dr. Kelly (sec. McLeod).

Whereas:

1. The University of Manitoba as a teaching institution was founded in 1904 to teach science, mainly at the request of the Colleges.
2. During the intervening fifty years the University has spent large sums to provide facilities, staff, and equipment for science instruction and the necessary concomitant research, culminating in the construction during the past year of buildings and facilities intended to accommodate all senior division instruction in science during the next twenty years.
3. Instruction in senior division science requires opportunity for the instructors to become familiar with and participate in the current development of science by wide reading and research, and the Colleges do not provide laboratories, libraries, or time for such research.
4. Even if the Colleges were prepared to introduce the research facilities required for advanced instruction, it is questionable if the people of this Province should be expected to pay for the multiplication of expensive facilities of the type required.
5. Introduction of instruction at the senior level by the Colleges would have a deleterious effect on the University science departments since their effectiveness depends upon maintaining a staff of reasonably large size and variety of experience, and this is justified only by the presence of a corresponding number of students at the senior level.
6. The above considerations become doubly significant now that the Faculty is considering the introduction of some compulsory specialization in the General B.Sc. programme.
7. The above considerations apply in principle to all Colleges but it is recognized that Brandon College, for geographical reasons, is in a unique position which might exclude it from this resolution.

Therefore, the Science Committee opposes the inception of the teaching of senior division science by the affiliated colleges in Greater Winnipeg.

The Science Committee Recommends:

1. That the entrance requirements to the Faculty of Arts and Science be brought into line with those of Home Economics and Engineering by requiring an average mark of at least 60% in the Junior or Senior Matriculation Examination submitted for University entrance.
2. That Prof. Whitmore's motion on a Merit Point Plan be amended to require that at least two merit points be earned in each of the 2nd 3rd and 4th years.
3. That the calendar be amended to allow students in the General Science course to elect honours courses in subjects in which they have shown competence and at the discretion of the relevant department.
4. That, as an option, Science students in the second year be permitted to replace the Group A subject by another Group C subject, reducing the Group A minimum from three to two courses and increasing the Group C maximum from fourteen to fifteen courses.

MINUTES of the Meeting of the Science Committee held on 30th March 1961

PRESENT: Professors Dunn (Chairman), Cooke, Brownell, Stewart-Hay, Connor, Hawirko, NER Campbell, AN Campbell, Kartzmark, Funt, Robinson, Kettner, Kelly, Douglas, Standil, Weismann, Whitmore, Coish, Hogg, Naqvi, Boch, Schaffer, McLeod.

- 1) The Minutes of the previous meeting were approved.
- 2) Mr. Foley's letter announcing the routing of current periodicals to the new Science Reading Room was read. The Secretary intimated that a list of 272 journals had been forwarded to Mr. Foley representing the requests from all departments except Geology. This department in view of the uncertainty of its location did not wish its journals moved meantime.
- 3) The report of the Radiation Committee referred (i) to the irregularity discovered on 28th February, (ii) the removal of the radioactive store and garbage, (iii) the monitoring proposals for the old Science building. Professor Kelly moved that the present committee be re-appointed. This was agreed.
- 4) Nominations to the Senate. Two nominees were appointed to stand election at the next meeting of the Faculty Council for the vacancy created by the retirement from the Senate of Professor NER Campbell. This was in response to the request from Professor Berry's Committee.  
Professors Coish and Funt were nominated.
- 5) Election of officers of Science Committee. Professor Isaac was elected Chairman and Professor Dahlstrom secretary.
- 6) Professor AN Campbell raised the matter of the colleges teaching the general science course through to 4th year. A small committee had been formed to examine the Colleges equipment to teach including personnel laboratory facilities and research facilities. According to the University act they could teach the general course to graduation.

Dr. Whitmore was concerned at the extension of the teaching of the general course to other centres. Standards tended to fall if several locations taught the same course. The University had spent large sums equipping the campus buildings to cope with the student enrolment over a 10 year period and it was most unfortunate that the Colleges should now intimate a desire to deflect students to themselves.

Dr. Funt held that some contact with the frontiers of the subject was necessary even at the second year level and Dr. McLeod opposed the move to senior science in that the colleges were likely to meet only the minimum requirements and were unlikely to attract suitable staff with their teaching loads and salary scales.

Dr. Cooke said the colleges were making a definite bid to get competent staff and were promising research facilities. The strength of a department lay in its size. To split up its small parts would not be good.

Dr. NER Campbell asked if the Province was prepared to support this duplication.

On the Motion of Professor McLeod (sec Funt) the following motion was advanced:-

"That this Committee opposes the inception of the teaching of senior division science subjects by the affiliated Colleges in Greater Winnipeg on the grounds that

- 1) fragmentation of this teaching is undesirable and inefficient.
- 2) contact with actual research is essential for science students and that in the absence of adequate facilities and time it is unlikely that teaching staff at the Colleges will be able to pursue research. "

This was carried unanimously.

7) On the motion of Dr. Funt it was agreed to call a further meeting on Monday 3rd April at 4 P.M. to explore this further and to consider in detail the report of the Committee on the General Course.

whereas.

1. The University of Manitoba as a teaching institution was founded in 1904 to teach science, <sup>principally</sup> at the request of the Colleges.

2. During the intervening fifty years the University has spent large sums to provide facilities, staff, and equipment for science instruction and the necessary concomitant research, culminating in the construction during the past year of buildings and facilities intended to accommodate all senior division instruction in science during the next twenty years.

3. Instruction in senior division science requires opportunity for the instructors to become familiar with and participate in the current development of science by wide reading and research, and the Colleges do not provide laboratories, libraries, or time for such research.

4. Even if the Colleges were prepared to introduce the research facilities required for advanced instruction, it is questionable if the people of this Province should be expected to pay for the multiplication of expensive facilities of the type required.

5. Introduction of instruction at the senior level by the Colleges would have a deleterious effect on the University science departments since their effectiveness depends upon maintaining a staff of reasonably large size and variety of experience, and this is justified only by the presence of a corresponding number of students at the senior level.

6. The above considerations <sup>are now</sup> ~~will become~~ doubly significant <sup>since the introduction</sup> ~~should~~ ~~the University wish at any future time to require~~ some specialization in the General B.Sc. programme. <sup>is now being considered</sup>

7. The above considerations apply in principle to all Colleges but it is recognized that Brandon College, for geographical reasons, is in a unique position which might exclude it from this resolution.



### SCIENCE COMMITTEE

There will be a meeting of the Science Committee in Room 111 Armes Building at 4 o'clock on Thursday, 30th March 1961.

#### A g e n d a

1. Minutes
2. Business arising out of the Minutes
3. Report of Radiation Committee
4. Report of Sub-Committee on the General Course
5. Election of a representative to the Senate
6. Election of Officers.
7. Any other business
8. Adjournment

R. D. Connor

Secretary

MINUTES of the Meeting of the Science Committee  
held on 1st March at 4 P.M., 1961

PRESENT Professors Dunn, Connor, Douglas, Coish,  
Neamtan, Cooke, McLeod, Weisman, Kettner, Standing,  
N.E.R. Campbell, Naqvi, Charlesworth, Isaac, Funt,  
Hawirko, Dahlstrom, Waygood, Fairweather, Brownell.

Visitor: Mr. Foley, Chief Librarian

1. A general discussion on the new Science Reading Room was held with Mr. Foley at which the view was expressed that it would be desirable to have current issues of all Science publications on display in this Reading Room. At the end of this discussion which lasted one hour Mr. Foley withdrew.
2. The Minutes of the last meeting were read and approved.
3. Dr. Neamtan proposed that we renew our request that all current periodicals be transferred to the Science Reading Room and left there until required for binding. (Sec. Isaacs)  
Carried unanimously
4. The matter of elections was raised. This will be taken care of at the next regular meeting.

2nd March 1961

Mr. Foley  
Chief Librarian

R. D. Connor - Science Committee

Dear Mr. Foley,

At its meeting on 1st March the SCIENCE COMMITTEE unanimously passed a resolution renewing our request that all current periodicals in Science be transferred to the Science Reading Room.

Our wish is for the current issues of these journals to be on effective display so that staff members may browse at leisure through all the journals of importance to them.

We would hope that issues would be allowed to accumulate in the Reading Room for a period of at least 2 or 3 months or even until the volume is complete and could be removed for binding whereupon the bound volume would be deposited with earlier volumes in the main library.

The term "all current periodicals in Science" requires some definition. To us this means all the major journals in the disciplines housed in the old and new Science buildings including Microbiology. The heads of departments are being asked to furnish the titles of journals requested by each department and the complete list will be sent to you as soon as it is available.

Yours sincerely,

R. D. Connor,  
Secretary,  
SCIENCE COMMITTEE.

RDC:bdh

THE UNIVERSITY OF MANITOBA  
INTER-DEPARTMENTAL CORRESPONDENCE

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DATE \_\_\_\_\_

TO Mr. Secretary FROM Mr. Chairman  
SUBJECT Science Reading Room

Please file with minutes  
or wherever you think appropriate

THE UNIVERSITY OF MANITOBA  
INTER-DEPARTMENTAL CORRESPONDENCE

DATE March 3, 1961.

TO D. Foley, University Librarian FROM E.R. Waygood

SUBJECT Science Branch Library

The members of the staff of the Botany department feel that if the present system of duplicating periodicals in the Science Library is continued then this duplication should be complete and cover all books. In other words the Central Library should remain intact as a unit as far as Science is concerned.

It is realized however that the cost of duplication is at the expense of the purchase of new and other periodicals which the Library is now lacking.

Suggestions have been made (Science Committee, March 1st) that all current issues of Science periodicals be made available in the Science Library. These suggestions did not include the transfer back, to the Central Library, of the books.

Accordingly, in order to avoid the confusion that now exists, this Department is suggesting the following, on a trial basis:

- (1) The duplication fund be cancelled.
- (2) Current issues of periodicals as requested by the Science departments be made available in the Branch Library for purposes of "browsing". The number of current issues made available would be decided by the Library Committee, but this should be made on the basis of a time limit rather than arbitrarily assigning a number of issues for each periodical. Thus a three-month time limit might include six issues of one journal (e.g. Jour. Biol. Chem.), three of another (e.g. Biochemical Jour.) and one or two of another (e.g. Can. J. Botany). However, the staff would know that issues published three months or six months (if desired) prior to the present date would be in the Central Library and the latest issues in the Branch Library. The advantages have been pointed out (Science Committee, March 1st) that there is room for "browsing" in the Branch Library, whereas little room in the Central Library. Any losses that might occur would be offset by savings in the Duplicating fund and the Replacement fund could be reimbursed to a certain extent.
- (3) The proposal that all books presently in the Branch Library and not duplicated in the Central Library should be transferred back would simplify matters considerably. However objections have been raised to this proposal (Science Committee, March 1st). Botany and Zoology would be in favor of this, and let us say for argument, Physics and Chemistry against. Even if an arrangement was made whereby all Biology books remain in the Central Library and the present automatic transfer

THE UNIVERSITY OF MANITOBA  
INTER-DEPARTMENTAL CORRESPONDENCE

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DATE Mar. 3/61

TO D. Foley, University Librarian FROM E.R. Waygood

SUBJECT Science Branch Library - Page Two

of Physics and Chemistry books continue, there would still be difficulties. For example, the Department of Botany has purchased, and will probably purchase in the future, a considerable number of books in the fields of Biochemistry and Biophysics which intrude into the realm of Modern Biology. Because of this we could not support the principle of automatic transfer of this category of books which would normally be classified in the Chemistry and Physics sections.

c.c. - Dr.G.E. Dunn,  
Chemistry Dept.

*SPW*

THE UNIVERSITY OF MANITOBA  
INTER-DEPARTMENTAL CORRESPONDENCE

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DATE 18 January 1960

TO President Saunderson FROM G.E. Dunn for Science Committee

SUBJECT Journals for the new Science Reading Room

I have circulated the attached list to the Chairmen of the Departments concerned and they have agreed to withdraw the journals listed below. It is hoped, of course, that they may be added to the list at some future date. I am informed that the journals marked "not a library subscription" on the original list are paid for from research funds by the departments concerned and will be transferred to the new reading room if the Library can not duplicate them.

American Journal of Public Health	\$13.00
American Medical Association Journal	17.00
American Mineralogist	6.00
Arkiv für Physik	25.60
Canadian Field Naturalist	4.00
Canadian Journal of Chemistry	12.00
Canadian Journal of Public Health	3.00
Canadian Mineralogist	5.00
Comptes Rendus	48.80
Gmelin's Handbuch	
Journal of Dairy Research	10.00
Journal of Dairy Science	15.50
Journal of Chemical Physics	25.00
Journal of Experimental Medicine	15.00
Journal of Polymer Science	139.50
Journal of Wildlife Management	6.00
Nuovo Cimento	32.25

25

THE UNIVERSITY OF MANITOBA  
INTER-DEPARTMENTAL CORRESPONDENCE


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DATE \_\_\_\_\_

TO \_\_\_\_\_ FROM \_\_\_\_\_

SUBJECT New Science Reading Room (continued)

Quarterly Review of Biology	10.25
Royal Society: Transactions & Proceedings	76.00
Society for Exptl. Biology and Medicine	17.50
Zeitschrift für Physik	<u>62.00</u>
Annual Review of Biology	7.50
Annual Review of Biochemistry	7.50
Annual Review of Microbiology	7.50
Annual Review of Physical Chemistry	7.50
Annual Review of Plant Physiology	<u>57.50</u>
	\$573.40

 Chairman  
Science Committee



2nd March 1961

To the Heads of Departments in Science

Dr. B. G. Whitmore -----Physics Department

Dr. A. N. Campbell-----Chemistry     ''

Dr. N. E. R. Campbell----Microbiology ''

Dr. G. M. Brownell-----Geology       ''

Dr. E. R. Waygood-----Botany       ''

Dr. J. A. McLeod-----Zoology       ''

From: Dr. R. D. Connor-----Physics,  
  Secretary,  
  SCIENCE COMMITTEE

PLEASE FORWARD TO THE UNDERSIGNED AT YOUR  
EARLIEST CONVENIENCE A LIST OF THE JOURNALS  
IN YOUR SUBJECT WHICH YOU WISH TO HAVE ON  
DISPLAY IN THE SCIENCE READING ROOM.

R. D. Connor  
Secretary  
Science Committee

bdh

THE UNIVERSITY OF MANITOBA  
INTER-DEPARTMENTAL CORRESPONDENCE

DATE March 8, 1961.

TO Professor R. D. Connor, FROM Mr. David W. Foley,  
Secretary, Science Committee. Chief Librarian.  
SUBJECT \_\_\_\_\_

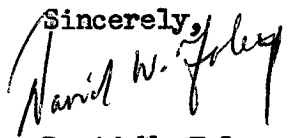
Dear Professor Connor:

At its meeting on March 3 the Library Committee approved the proposal that current journal in Science be routed to the Science Reading Room on a trial basis, for a period to be determined by the Chief Librarian.

I should appreciate it therefore if you would continue the preparation of a list of journal titles requested by the departments concerned, and send it to the Library. Miss Sparling tells me that just at present her staff is busy trying to rush through all the binding possible before the end of the fiscal year, but I trust that by the end of the month we can begin putting the new arrangement into effect.

I should like to try routing the journals for the more limited period of two to three months for a while, until we can determine to some extent our loss experience, and the possible effect of removal on other library users.

May I take this opportunity also to thank the Science Committee for inviting me to their meeting, and for their cordial reception.

Sincerely,  
  
David W. Foley,  
Chief Librarian.

DWF/nn

*272 journals requested*

27th March 1961

Mr. Foley,  
Chief Librarian

Science Committee

Dear Mr. Foley,

We were happy to receive your memorandum of 8th March re journals in the new Science Reading Room.

I have circulated all departments with a periodicals list and have underlined the journals requested and annotated the department(s) making the request. The Geology Department has not asked for its journals to be transferred as the location of the Department is uncertain at present.

We would like to thank you for giving of your time to come and speak to us.

Yours sincerely,

R. D. Connor.

RDC:bdh

## Report of Committee on the General Course

A committee consisting of Professors Connor (Chairman), Brownell, Charlesworth, McLeod, Neamtan, Isaac and Hawirko was struck to recommend means of improving the quality of the general degree in Science.

The Committee first considered Professor Connor's earlier suggestion that all general courses be abolished and that there be a single course in each subject for each year of study. It was decided not to recommend this plan as it was feared that the fusion of general with honours students could only lead to a weakening of the honours programme.

We then considered the possible impact of some form of merit point plan. An annual merit point plan was preferred to a cumulative total point plan as it was felt unjust to allow a poor student to proceed in the hope that he could pick up the necessary total number of points in the later years.

The scheme finally adopted for submission to the Science Committee is as follows:-

''that General degree<sup>Scinua</sup> students be required to obtain annually a minimum of 3 merit points on the April examinations on the basis of one point for every examination mark between 60 and 69% inclusive, and two for every mark of 70% and over. No points are to be awarded for Supplemental examinations. In addition it is recommended that as an option, General degree students in the present Second year of study be allowed to drop the Group A subject and substitute another Group C subject.

This will involve a change in the maximum and minimum requirements (p.101 Calendar) viz. Science Group A minimum now 2 instead of 3. Group C maximum now 15 instead of 14. Further, the Calendar should be amended to allow students in the general course to elect honours courses in subjects in which they have shown competence and at the discretion of the relevant department.

Mr. Chevrier has kindly analysed the general students writing second year subjects in April 1959 and has calculated the effort such a programme would have had on these students in the light of their subsequent performance.

The salient features are:-

1) This points plan would approximately double the second year failure rate.

2) Of those who would have been stopped by the application of this plan and who returned for 3rd year work 76% passed their 3rd year.

(Mr. Chevriers analysis is appended)

Notwithstanding these consequences the Committee recommends this plan to the Science Committee on a number of counts.

(a) It is felt that if the students knew of the plan in advance they would study harder and improve their standings.

(b) Dr. Whitmore's committee has shown that a similar merit plan might not seriously affect the number graduating, the implication being that of those in Second year by no means all graduate.

(c) If 76% of those who in Second year could not get 3 points pass 3rd year this may be an indication of the weakness of the 3rd year of study.

ARTS AND SCIENCE  
 Second Year  
 A - L  
 1958 - 1959

Total number of candidates at April 1959 examinations - 485

	Men	Women	total	
Arts Candidates	122	101	224	
Science     ''	234	28	<u>261</u>	485

Application of point scoring system April 1959

Points	Arts		Science		
	Men	Women	Men	Women	
0	68 {	{	146 {	{	275 {
1					
2					
3					
4	6	11	13	1	31
5	7	8	10	2	27
6	7	5	12	2	26
7	5	5	14	1	25
8	4	4	8	0	16
9	0	3	5	2	10
10	1	2	2	5	10
DNW	<u>2</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>5</u>
	122	101	234	28	485

% failing under point scoring system					
	55.7	47.5	62.4	47.1	<u>56.7%</u>

% failing under present regulations - April 1959					
April	16.4	6	31.2	18	21.4%
Sept.	23	11.8	36	32.1	27.4%

	Arts		Science	
	Men	Women	Men	Women
Passed	85	79	123	16
Failed	20	6	73	5
*Provisional standing	15	16	35	7
DNW	<u>2</u>	<u>-</u>	<u>3</u>	<u>-</u>
Total	122	101	234	28
%failing	16.4%	6%	31.2%	18%

\*Results of September 1959 examinations  
 Passed at least one paper and gained credit for year

7	10	24	3
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Failed to pass at least one paper and failed year

8	6	11	4
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Total failing year

28	12	84	9
% failing year			
23	11.9	36	32.1

A - April 1959 - number of candidates gaining less than 3 points

I Arts		II Science	
Men	68		146
Women	<u>48</u>		<u>13</u>
Total	116	159	275

B - April 1960 - Frequency distribution of those candidates itemized in  
A I and II

	ARTS		SCIENCE	
	Men	Women	Men	Women
Passed 5	10	18	33	5
Passed 4, failed 1	16	6	26	2
Passed 3, failed 2	+7	+8	+22	+1
Passed 2, failed 3	3	2	2	-
Passed 1, failed 4	3	-	10	-
Failed 5	-	-	-	-
Transferred:				
Passed	1	-	7	-
Failed	-	-	-	-
Did not register 1959-60	28	14	46	4
TOTAL	68	48	146	13

II \*As the result of Summer School or September Examinations the  
38 students involved obtained the following status for the  
year 1959-60

Passed	24
Failed	<u>14</u>
	38

C - Percentage passing year in B I of those who returned for session  
overall  
1959-60; April 26/40 24/34 59/100 7/9 116/183  
65% 70.6 59 77.7 63.4%  
Sept. 76%