

# SIMON FRASER UNIVERSITY

S.79-107

## MEMORANDUM

To: SENATE

From: SENATE COMMITTEE ON UNDERGRADUATE  
STUDIES

Subject: 1. NEW COURSE PROPOSAL - PHIL 140-3 -  
THE NATURE OF SCIENCE  
2. DISCONTINUANCE OF G.S. 104-3 - THE  
SCIENTIFIC ETHOS

Date: OCTOBER 23, 1979

Action taken by the Senate Committee on Undergraduate Studies at its meeting of October 9, 1979 gives rise to the following motion:

MOTION: "That Senate approve and recommend approval to the Board of Governors, as set forth in S.79-107, the new course PHIL 140-3 - The Nature of Science, with discontinuance of the course G.S. 104-3 - The Scientific Ethos."

It was noted that basically this represents a transfer from General Studies to the Department of Philosophy of this course, and this is consistent with some earlier moves of this type.

SIMON FRASER UNIVERSITY

SCUS 79-30

MEMORANDUM

Mr. H.M. Evans, Secretary

From Sheila Roberts, Secretary

S.C.U.S.

Faculty of Arts Curriculum Committee

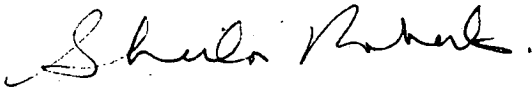
Subject New Course Proposal - PHIL  
140-3

Date October 3, 1979

Attached is a new course proposal from the Department of Philosophy which was approved by the Faculty of Arts Curriculum Committee at its meeting of September 20, 1979. I would draw to your attention that this course, although new to the Faculty of Arts and the Department of Philosophy, is not a new course, it was formerly taught under the number G.S. 104, and is essentially been transferred to this Faculty from the Faculty of Interdisciplinary Studies.

Would you please place this item on the next agenda of S.C.U.S.

Thank you.



S. Roberts

cc. J. Tietz, Philosophy Department

SR:nl

NEW COURSE PROPOSAL FORM

1. Calendar Information

Department: Philosophy

Abbreviation Code: PHIL Course Number: 140 Credit Hours: 3 Vector: 2-1-0

Title of Course: The Nature of Science (Formerly GS 104, The Scientific Ethos)

Calendar Description of Course:

A general examination of how historians, scientists, sociologists, and philosophers answer the question: What is Science? Historical and contemporary examples of scientific discovery will be used to illustrate the different approaches.

(Students with credit for GS 104 The Scientific Ethos may not take PHIL 140 Nature of Course for further credit.)

Prerequisites (or special instructions):

What course (courses), if any, is being dropped from the calendar if this course is approved: GS 104

2. Scheduling

How frequently will the course be offered? Once yearly

Semester in which the course will first be offered? 81-1

Which of your present faculty would be available to make the proposed offering possible? Mannah Gay is at present hired on a sessional basis to teach this course and PHIL 243 (formerly GS 201).

Objectives of the Course

To acquaint students with some of the standard theories of scientific method, and to introduce some ideas from the sociology of knowledge, philosophy of history, and philosophy of science. The course is seen as a broad introduction to the study of scientific inquiry, a topic which is taken up in more detail in PHIL 243 (Historical Studies in the Philosophy of Science) and in PHIL 341 (Philosophy of Science).

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty See attached memo.

Staff

Library

Audio Visual

Space

Equipment

5. Approval

Date: 6 Sept 79

Oct 3/79

OCT 9 79

[Signature]  
Department Chairman

[Signature]  
Dean

[Signature]  
Chairman, SCUS

We shall examine the scientific enterprise in a very general way by looking at its methods, its social function, and its promises and threats for the future of mankind.

The weeks will be roughly occupied as follows:

- |                             |   |
|-----------------------------|---|
| Weeks 1 & 2                 | General introduction to the nature of scientific method.  |
| Week 3                      | Some theories from contemporary sociology of science.   |
| Weeks 4 & 5                 | The nature of scientific objectivity. How neutral is science? This discussion will be illustrated with case studies of the Copernican Revolution and the development of Darwin's Theory of Evolution. |
| Weeks 6 & 7                 | The rise of Mechanical Philosophy; Descartes, Galileo, Bacon, Newton. Utopian ideas of the Scientific Revolution.   |
| Weeks 8 & 9                 | The Industrial Revolution and its progress in the 20th Century. The Romantic reaction and the 20th Century reaction towards present day science.  |
| Weeks 10 to end of Semester | The 20th Century scientific community. Current problems and case studies.   |

Grades will be assessed on the basis of two take-home examinations.

General Reading List placed on Reserve:

The Science of Science, M. Goldsmith and A. Mackay (editors) (1964)

The Social Impact of Modern Biology, W. Fuller (editor) (1971)

Liberation and the Aims of Science, B. Easlea, (1973)

Scientific Knowledge and its Social Problems, J. Ravetz, (1971)

Science Observed, F.R. Jevons, (1973)

Modern Science and Modern Man, J.B. Conant, (1952)

Science and Society, H. & S. Rose, (1970)

General Reading List placed on Reserve (cont'd.)

The Sociology of Science: Selected Readings, S.B. Barnes (editor), (1972)

The New Scientist - Essays on the Methods and Values of Modern Science,  
P.C. Obler and H.A. Estrin (editors), (1962)

Prerequisites: None

<u>Classes Scheduled:</u>	Thursdays	6:30 - 8:20 p.m.	5025 AQ	Lecture
	Thursdays	8:30 - 9:20 p.m.	5025 AQ	Tutorial

# SIMON FRASER UNIVERSITY

## MEMORANDUM

Wynn Roberts, Chm, Undergraduate  
Studies Committee, Faculty of Arts  
Subject: Transfer of GS 104 to Philosophy Dept.

From: John Tietz  
Philosophy Department  
Date: Sept. 4, 1979

(now PHIL 243)

As with the former GS 201, we are requesting the transfer of GS 104 to the Philosophy Department with some minor editorial changes (as included in the attached course proposal form). The financial arrangements will be the same as with GS 201, namely, a transfer of the appropriate funds to the Philosophy Department for one sessional instructorship per year (i.e., one each for each of the transferred courses). Dean ~~Calvert~~ of Continuing Studies has agreed to this.

Blaney

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