SIMON FRASER UNIVERSITY

MEMORANDUM

Senate	From Senate Committee on
	Undergraduate Studies
Subject New Course - G.S. 227-3	Date November 15, 1979

Action taken by the Senate Committee on Undergraduate Studies at its meeting of October 30th, 1979 gives rise to the following motion:

MOTION

That Senate approve and recommend approval to the Board, as set out in S79-139, the proposed $he\omega$ Course G.S.227-3 On the Seriousness of the Future .

Note - G.S. 227 has been developed to complement the existing course G.S. 427 (The Study of the Future) which has been offered for more than ten years. The latter course examines alternative responses to the fact that the future entails serious problems. The proposed course will examine alternative views of the evidence that the future entails serious problems. Although the subject matter of the two courses is logically related, SCUS accepted the argument that the courses will not entail undue overlap and that neither need depend on the other.

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Daniel R. Birch Chairman

DRB/pa

SIMON FRASER UNIVERSITY SCUS 79-36 MEMORANDUM

Mr. H.M. Evans, Registrar and	From Dr. Thomas W. Calvert, Dean
Secretary, SQJS	Faculty of Interdisciplinary Studies
Subject G.S. 227 - 3 On The Sprinusness	Date October 4, 1979
New Course Proposal	
New Course Proposal	

I attach the proposal for G.S. 227 which was considered earlier by SCUS. This is resubmitted with some additional material and minor revisions to the prerequisites.

Thomas Dean

TWC:jk

Attach.

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SENATE COMMITTEE ON UNDERGRADUATE STUDIES	Revised
NEW COURSE PROPOSAL FORM Faculty of	f Interdisciplinary Studies
, Calendar Information Department:	
	3 Vector: 2-1
Title of Course: ON THE SERIOUSNESS OF THE FUTURE	
Calendar Description of Course: An exploration of the central co	ntroversies
concerning the alleged seriousne	
	.
Nature of Course A general introduction and overview designed for in their first two years	students normally of University
Prerequisites (or special instructions): In their first two years See attached.	
See attached.	· · ·
What course (courses), if any, is being dropped from the calendar	if this course is
approved: None	
2. Scheduling	
How frequently will the course be offered? Once or twice a ye	ar
Semester in which the course will first be offered? Summer, 198	30
Which of your present faculty would be available to make the prop	osed offering
possible? W. Basil McDermott	
-3. Objectives of the Course To explore the following questions:	
 (1) What are the central issues that 'future watchers' worry about (2) What criteria do different people use to establish priorities (3) How are the major problem areas related to one another? 	es of worry and concern?
(4) What are the implications of our inability to understand pro astutely any one of these problem areas?	periy of to control
4. Budgetary and Space Requirements (for information only)	
What additional resources will be required in the following areas	S:
Faculty None	
Staff None	
Library There is adequate reference material on hand to enable st	tudents to do
Audio Visual None	136,
Space None	
Equipment None	
5. Approval	007 30 79
Date:	061 30
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J. W. Boher Ja	Chairman, SCUS
Department Chairman Dean	Glattuan, 5005

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SCUS 73-34b:- (When completing this form, for instructions see Memorandum SCUS 73-34a. Attach course outline). <u>COURSE OUTLINE IS ATTACHED</u> New Course Proposal Form G.S. 227-3 cont'd

PREREQUISITES:

30 hours, or permission of the Instructor.

Students will find the following <u>recommended</u> courses helpful in understanding alternative perspectives on contemporary and future problems:

> Hist 190-3 (Approaches to History) Phil 100-3 (Human Knowledge, Its Nature and Scope) Bisc 003-3 (Ecology and the Population Explosion) Chem 003-3 (Chemistry, Technology and Society) Chem 004-3 (Pollution, Energy and Resources) Geog 001-3 (The Geography of Technocratic Society Psyc 106-3 (Social Issues) Kin. 140-3 (Contemporary Health Issues)

New Course Proposal Form G.S. 227-3 attach.

RELATIONSHIP OF G.S. 227 to G.S. 427 (THE STUDY OF THE FUTURE)

G.S. 227 was designed to complement the perspective on the future that has evolved in G.S. 427 (The Study of the Future) which has been taught on a regular basis since 1968. The focus of the lower level course can be distinguished from the upper level one in the following way:

1) G.S. 227 is intended to present an overview on our projected problems in different areas of life. It focuses on the central controversies and how they are related to one another. It attempts to evaluate the criteria different people use to decide which problems are more serious than others. The central question around which the lectures and readings revolves is:

"Just how serious is the future likely to be?"

2) G.S. 427 has evolved considerably over the past decade in terms of lectures, readings, and perspective. I see the future focus of the course to revolve around the question:

"What does it mean to be serious about the future?"

The course explores the nature of our available knowledge upon which we must rely as we attempt to cope with various problems facing us today, as well as tomorrow. Currently I am focussing attention on the dilemmas that arise in trying to deal with 'the commons problem' as originally set forth by Garrett Hardin. The course considers alternative views of what it means to be 'serious' about our persistent problems and poses the uncongenial suggestion that we may be unable to manage the future very well at all. Hence, there is a consideration of the proposition that a serious response to the future may involve a reluctant preparation for protracted societal deterioration and decline. The course also explores the nature of alternative 'control systems' in relationship to the future.

ON THE SERIOUSNESS OF THE FUTURE

General Studies 227 Faculty of Interdisciplinary Studies Simon Fraser University Burnaby, British Columbia, Canada V5A 1S6

Dr. W. Basil McDermott Office: CB 9213 Phone: 291-3763

INTRODUCTION

"In an age when men have invented machines to melt cities, an age in which war has become the norm and in which the only question is how hot or cold it is to be, it should hardly be necessary to speak of the seriousness of the future . . . Yet I do not believe that most of us take the future very seriously."

Robert L. Heilbroner . . .

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I wish to speak with you about the seriousness of the future. This is no easy task and at moments my resolve weakens and I am strongly tempted to flee from the topic. For I painfully realize that even if I desired to be serious about the future, there are many obstacles that thwart my ability to do so. Indeed, the very concept of 'the future' itself easily becomes a slippery metaphor for 'all of reality' and as such comes to include all of our hopes and fears. A concept or topic that seemingly includes 'everything' thus lends itself to intense controversy. And this is one of the first things we discover when we attempt to speak about 'the future': People disagree about the prospects ahead. We will learn rather quickly that some individuals are quite worried about the possibility, probability, or even inevitability in their view, of an immensely devastating nuclear, biological, or chemical war that may extinguish human life altogether. Or we may note that others argue the growing world population (although they concede that the rate of growth is slowing) will not become 'stabilized' prior to a series of cruel famines. In addition, with an increase in human numbers concentrated mostly in the poorer regions of the world, they can only forsee greater human misery on the horizon. There are, moreover, those who indict the 'industrialized' areas of the world for creating energy shortages, vast patterns of pollution, inflation, unemployment, and

unlivable cities. Furthermore, there is the special dread of those who fear our delicate and fragile biosphere is rapidly being strained beyond its limits, and that a climatic or biological 'collapse' may occur. The cumulative picture of the future is thus a combination of Armageddon, 1984, or the bleak, stark image of bestial existence imagined by Thomas Hobbes to be the special reserve of humans living outside the pale of civilization in a 'state of nature' in which life is 'solitary, poor, nasty, brutish, and short.'

According to others this is an entirely outrageous view of the future. To counter such expressions of fear, alarm, or, as they would consider it, morbid fantasy, they point to the not inconsiderable human achievements of our era. They readily concede that certain crucial problems exist today but they quickly add that human ingenuity, hard work, and the application of our current and growing scientific knowledge will enable us to cope reasonably well. They would add, I believe, that the prophets of doom and gloom have excessively exaggerated the seriousness of the alleged threats to human well being in the future and have significantly underestimated our potential to respond to the challenges of our age.

But the question still remains: Just how serious is the future likely to be? Is there any way to really know which problems are most serious and what, if anything, can or should be done about them? Is it possible to make sense out of the conflicting outlooks on the potential seriousness of the future? This course attempts to provide a way to explore such questions. It does so by examining the central controversies now raging about the presumed seriousness of the future. Unfortunately, there can be no ultimate resolution on most of these matters. This is because "even if we obtained as much data about the future as the historians have about the past, we would still be as uncertain in our interpretations of the future as the historians are in their interpretations of the past." (Fred C. Ikle) We must always bear in mind that people disagree not simply about what they think may occur in the future but also about what they would prefer to have happen. In our exploration of the nature of the problems facing us, I shall devote special attention to certain kinds of connections that exist between different types of problems. Some of these connections may well have surprising or unanticipated consequences for us.

Finally, in this brief introductory statement, permit me to add a mild caveat. In my view no serious person can claim to have definitive proof of what the future holds in store for us in all important respects. Nevertheless, a lack of 'conclusive advance evidence' is not a sufficient reason for refusing to assess, as best we can, the potential seriousness of our assorted and interrelated problems. In a word, though all thought about the future involves an unavoidable and uncomfortable element of speculation, not all speculation is equally thoughtful or helpful. More

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than a decade of 'future watching' has taught me how easy it is to be careless in how we think about different aspects of the future. I shall attempt in this course, therefore, to avoid as much carelessness as I possibly can.

TEXTS

The required reading for the course consists of three books. Throughout the course outline I have also indicated additional material to which the student may wish to refer. Furthermore, one may consult the additional reading lists at the end of two of the texts for the course, The Twenty-Ninth Day, and The Next 200 Years. Within the course outline itself I have attempted to keep such a list representative of various 'positions' and 'outlooks' on different aspects of the future. Everyone, I am sure, has his own favorite list of "the most relevant books". Since it is impossible for anyone to keep pace with the growing literature in this area, one is forced to be selective and hence run the risk of excluding some book that another may think is highly important. When you run across an individual who looks askance when you reluctantly admit that you have not read a particular book he has just mentioned (that person subtly hinting ever so gently that this book is 'crucial' for a real understanding of the basic issues) let me suggest that you ask the person to explain the central thesis of the book, along with the evidence it draws upon to support such a thesis, so that you may decide for yourself if it merits further attention. Fortunately when it comes to the study of the future, there are many books exploring similar themes. Indeed, if everyone had to read precisely the same books that everyone else has read in order to come to a corresponding understanding of what is to be discussed then our situation would indeed be more difficult than it actually is. So before we eagerly insist that another person read the latest book that we are enthused over, let us prepare ourselves to give sound reasons why a person should expend his time and energy in this manner.

Robert L. Heilbroner. An Inquiry Into the Human Prospect. New York: Norton, 1975.

Herman Kahn, William Brown & Leon Martel. <u>The Next 200 Years</u>. New York: William & Morrow, 1976.

Lester R. Brown. The Twenty-Ninth Day: Accomodating Human Needs and Numbers to the Earth's Resources. New York: Norton, 1978.

COURSE REQUIREMENTS

Grading for the course will be equally weighted on four activities: (1) A term paper; (2) A Mid-Semester Examination; (3) The quality of one's tutorial performance; and (4) a Final Examination.

LECTURES

I shall commence with a general overview on how I have come to think about the future as a result of more than a decade of 'future watching' in my teaching and research. Then I shall devote some attention to certain basic problems that arise when we attempt to predict, let alone control, different aspects of the future. The fundamental emphasis of the course, however, will concern an exploration of the major controversies about the alleged seriousness of the future. I shall focus on the following questions: (1) What are the central issues that future watchers worry about? (2) How are these problems connected to one another? (3) What criteria do different people use to establish priorities of worry and concern? (4) What are the implications of our inability to understand properly or to control astutely any one of these problems?

I. WHAT TEN YEARS OF TEACHING ABOUT THE FUTURE HAVE TAUGHT ME

. . Some reservations about the sufficiency of our currently growing knowledge to control the major problems of our era . . .

Required

Heilbroner, Chs. 1-2.

Reference

Kenneth E. Boulding. The Meaning of the Twentieth Century. New York: Harper Colophon Books, 1964.

Robert L. Heilbroner. <u>The Future as History</u>. New York: Harper & Brothers, 1959.

II. THE KING'S MESSENGER PROBLEM

"If the news that you bring is dreaded to hear, By the King and his Court, then you'd better have fear. For he who bad tidings dares to report, May find that his life has been cut quite short."

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• On the role of psychological denial, selective perception, and fear in our <u>willingness</u> to evaluate the seriousness of different problems.

Required

Heilbroner, Chs. 3-4.

Reference

John Maddox. The Doomsday Syndrome. New York: McGraw-Hill, 1972.

Edgar Goldsmith, et. al., "A Blue Print For Survival", <u>The Ecologist</u>, Vol. II:1 (January, 1972), 1-43.

III. THE CRYSTAL BALL PROBLEM

"Though a man may be brave, And willing right now, To peer at the Future, He may not know how."

• On the limits of various methods used to predict the future . . .

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... "What can we really know about the future? Precious little! But that little is precious." Kenneth Boulding

Required

Heilbroner, 127-178.

Reference

Bertrand de Jouvenel. <u>The Art of Conjecture</u>. New York: Basic Books, 1964.

Victor Ferkiss. Futurology: Promise, Performance, Prospects. Beverly Hills: Sage Publications, 1977.

Arthur C. Clarke. Profiles of the Future. New York: Harper & Row, 1958.

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IV. THE DOOMSDAY PROBLEM: REFLECTIONS ON MODERN WARFARE TECHNOLOGY

"Some say the Bomb will have the Distinction, Of leading our species on to Extinction."

. What are the alternative interpretations of the significance of our accelerating weapons technology? In what sense does the nature of modern warfare pose a unique threat to the survival of life on our planet?

Required

Kahn, Chs. 1-2.

Reference

Gordon R. Taylor. <u>The Doomsday Book</u>. London: Thames & Hudson, 1970.

Stockholm International Peace Research Institute Yearbook of World Armaments and Disarmament. New York: Humanities Press. Yearly edition since 1968.

Kenneth E. Boulding. <u>Stable Peace</u>. Austin: University of Texas Press, 1978.

V. THE LIMITS TO GROWTH CONTROVERSY I: MAKING SENSE OF THE BASIC QUESTIONS AND PERSPECTIVES IN DISPUTE

- . "200 years ago almost everywhere human beings were comparatively few, poor and at the mercy of the forces of nature, and 200 years from now, we expect, almost everywhere they will be numerous, rich and in control of the forces of nature." Herman Kahn
- . "Whether we are unable to sustain growth or unable to tolerate it, the long era of industrial expansion is now entering its final stages, and we must anticipate the commencement of a new era of stationary total output and (if population growth continues or an equitable sharing among nations has not yet been attained) declining material output per head in the advanced nations." Robert L. Heilbroner

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Required

Kahn, Chs. 3-4.

Reference

- Dennis L. Meadows, <u>et al.</u>, <u>The Limits to Growth: A</u> <u>Report for the Club of Rome's Project on the</u> <u>Predicament of Mankind</u>. London: Earth Island <u>Ltd.</u>, 1972.
- H.S.D. Cole, C. Freeman, M. Jahoda, and K.L.R. Pavitt (Eds.), Models of Doom: A Critique of the Limits to Growth. New York: Universe, 1973.

M. Mesarovic and E. Pestel, <u>Mankind at the Turning Point:</u> <u>The Second Report to the Club of Rome</u>. New York: E.P. Dutton, 1974.

VI. THE LIMITS TO GROWTH CONTROVERSY II: ALTERNATIVE ENERGY REQUIRE-MENTS AND FUTURE ASPIRATIONS

• On the implications and potential consequences of the increasing demand for both renewable and nonrenewable sources of energy . . .

Required

Kahn, Chs. 5-6.

Reference

- M. Olsen & Hans H. Landsberg (eds.) <u>The No-Growth Society</u>. New York: Norton, 1973.
- Hazel Henderson. Creating Alternative Futures. Berkeley Pub., 1978.

Fred Knelman. Anti-Nation: Transition to Sustainability. Oakville, Ontario: Mosaic Press, 1979.

VII. THE LIMITS TO GROWIH CONTROVERSY III: ALTERNATIVE KINDS OF "CARRYING CAPACITIES" AND HOW THEY INTERACT WITH OTHER ASPECTS OF LIFE

"The survival of man is in question. Some say through a lack of reflection. But it's hard to contain, A yearning for gain, Unless you enforce discretion."

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. . . "It is one thing to ponder how much we can 'take' from the Earth; it is another to explore how much the Earth can 'take' from assorted kinds of human activity."

Required

Kahn, Chs. 7-9.

Reference

- Barry Commoner. <u>The Closing Circle</u>. New York: Knopf, 1972.
- Gerard O'Neill. The High Frontier Human Colonies in Space. Bantam, 1978.

VIII. THE LIMITS TO GROWTH CONTROVERSY IV: THE 'MORE' PROBLEM

. . 'Millions yearn for immortality who do not know what to do with themselves on a rainy Sunday afternoon." Susan Ertz

Required

Brown, Chs. 1-3.

Reference

- Fred Hirsch, Social Limits to Growth. Cambridge: Harvard, 1976.
- Wassily Leontief, et al., Future of the World Economy: A United Nations Study. Oxford University Press, 1977.
- Dennis L. Meadows (Ed.), <u>Alternatives to Growth I: A Search</u> for Sustainable Futures. Ballinger, 1977.

IX. OF HUMAN NUMBERS: TOWARD A UNIVERSAL POPULATION POLICY?

- . . "The question is not so much, 'How many people can the earth possibly maintain?' Rather, it is: "How many people do we wish to live at what level of affluence, for what period of time, and doing what sorts of things with their time and energy?'"
- . . What would a 'rational' population policy for the entire world look like?

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Required

Brown, Chs. 4-5.

Reference

G. Hardin & J. Baden (eds.) Managing the Commons. San Francisco: W.H. Freeman, 1977.

Aurelio Peccei. The Human Quality. Pergamon, 1977.

X. THE BIOCHEMEDICAL REVOLUTION

"The price of immortality is a childless world."

. . . From the regulation of human numbers to the specification of human characteristics. Where is our knowledge of life processes taking us? How is this vast area of growing knowledge related to other problems of the future?

Required

Brown, Chs. 6-7.

Reference

- Gordon Wolstenholme (ed.). Man and His Future. Boston: Little, Brown and Company, 1963.
- Gordon R. Taylor. <u>The Biological Time Bomb</u>. New York: The World Publishing Co., 1968.
- Joel Kurtzman & Philip Gordon. No More Dying: The Conquest of Aging and the Extension of Human Life. Los Angeles: J.P. Tarcher, Inc., 1976.

XI. ON THE "LAW" OF THE CONSERVATION OF MISERY AND TROUBLE

"Ashes to ashes, Dust to dust, If the Bomb doesn't get you, The Pollution must."

... Why is it that one person's 'progress' has so often been another person's pain?

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Required

Brown, Chs. 8-9.

Reference

- Barrington Moore Jr. <u>Reflections on the Causes of Human</u> <u>Misery and Upon Certain Proposals to Elimate Them.</u> Boston: Beacon Press, 1972.
- William H. McNeil. <u>Plagues and Peoples</u>. New York: Anchor Press, 1976.
- F.M. Esfandiary, Optimism One (1970) & Up-Wingers: A Futurist Manifesto (1973). Fawcett Popular Library, 1978.

XII. ON TAKING DECLINE SERIOUSLY

• • An examination of both the difficulties and importance of taking the prospects of decline more seriously than we have to date . . .

Required

Brown, Chs. 10-12.

Reference

Theodore Roszak. <u>Person/Planet:</u> The Creative Disintegration of Industrial Society. New York: Anchor Press, 1978. Gordon Rattray Taylor. <u>Rethink: A Paraprimitive Solution</u>. New York: Dutton, 1973.

Victor Ferkiss. The Future of Technological Civilization. New York: Braziller, 1974.