Resolution #26
1977-1978

TO: PRESIDENT ALBERT W. BROWN
FROM: THE FACULTY SENATE

RE: XX I. Formal Resolution (Act of Determination) XX II. Recommendation (Urging the fitness of) XX III. Other (Notice, Request, Report, etc.)

SUBJECT: Academic Minor in Future Studies

(See attached)

Signed: [Signature]
Date: May 24, 1978

TO: THE FACULTY SENATE
FROM: PRESIDENT ALBERT W. BROWN

RE: I. DECISION AND ACTION TAKEN ON FORMAL RESOLUTION

a. Accepted. Effective Date 9/78
b. Deferred for discussion with the Faculty Senate on

II. III. a. Received and acknowledged
   b. Comment:

DISTRIBUTION: Vice Presidents: Mullin, Farno, Dickey

Others as identified: [List]

Distribution Date: [Date]

Signed: [Signature]
(President of the College)

Date Received by the Senate: [Date]
Dr. Harold Greenstein, President
Faculty Senate
State University College
Brockport, New York 14420

Dear Dr. Greenstein:

This Committee proposes that the State University College at Brockport undertake to offer an academic minor of eighteen credit hours, this minor to be in Future Studies.

Future Studies are:

"...any efforts to systematize our assumptions and perceptions about the future. These fall into three categories: the exploration of possible futures (the art of futurism); the exploration of probable futures (the science of futurism); and the exploration of preferable futures (the politics and psychology of futurism.)"

(Roy Amara, quoted in "The Futurist," (February, 1977, p. 47)

How can you study the future when it doesn't exist? "One answer is, we already study history...even though the past has ceased to exist. Traditional education has been concerned largely with teaching us what's been done in the past. In recent years, however, educators have turned their attention to the future, and courses in 'futuristics' are growing in number, variety and presumably quality. In the United States, college courses devoted to teaching about the future had already begun to appear in the 1960's. Within a few years courses in the future were popping up all over the country. Eighty were reported in 1970; today they number in the hundreds, and they cover a broad spectrum of fields...High schools and even elementary schools now include the future in their curricula. In a society that grows more complicated every day, the need for predicting the future and planning ahead is becoming increasingly urgent." (Rosen, Stephen, Future Facts. New York: Simon and Schuster, 1976, pp. 307-308.)

In order for today's students to become tomorrow's responsible parents and citizens of the world, they need exposure to models for tomorrow based on today's knowledge. They need to
become more aware of the ways in which today's decisions, actions and inactions will affect their lives, the lives of their children, and future generations. Reaching this awareness will help them develop sufficient social conscience to be willing to accept their share of responsibility for these decisions.

Future Studies would look at our current state and ask questions about tomorrow in order to assess possibilities and probabilities for the future:

(a) to consider desirable values and goals for the future
(b) to identify undesirable possibilities for the future and how to avoid them
(c) to orient students to their future and that of the world.

The Minor in Future Studies would offer a series of courses which would provide a coherent course of study, taking present knowledge in many areas of today's life and projecting into the future. This course of study would offer an intellectual framework which would better prepare students for their future than the several disparate courses which they may now take but which have no linkage. Most academic disciplines and many specific individual courses have important implications for the future but, due to time constraints, these implications are often neglected (omitted from curricula and/or from individual courses) so that more time may be spent on the fundamentals of the discipline. The Minor in Future Studies is an attempt to fill this academic void and give the student a cohesive, broad view of the future's implications of his own and a variety of other academic disciplines.

The minor would support and complement many major areas of study, including both liberal arts and professional programs (e.g. in Natural Sciences, Political Science, Social Sciences, Urban Planning, Recreation, Economics, etc.)

We feel that there is a need for this minor, and hope that the Faculty Senate will agree.

Submitted by the Committee on Future Studies:
Dr. Robert Cassie, Earth Science
Dr. Tad Clements, Philosophy
Dr. Herbert Douglas, African/Afro-American Studies
Dr. Clarence Gehris, Biological Science
Mr. Donald Haynes, Health Science
Mrs. Teresa Knapp, The Alternate College
Dr. Dennis Martin, Mathematics
Dr. Lionel Metivier, Educational Administration
Dr. James Newton, Geography
Mr. William Rowley, The Alternate College/Art
Dr. Patricia Taylor, Political Science

xc: D. Hamilton
PROPOSAL: THAT THE STATE UNIVERSITY COLLEGE AT BROCKPORT UNDERTAKE TO OFFER AN ACADEMIC MINOR OF EIGHTEEN CREDIT HOURS, THIS MINOR TO BE IN FUTURE STUDIES.

THE PROGRAM: Students would enroll in eighteen hours of coursework, including many courses which are currently offered at Brockport. Included in the required courses would be a survey course (three credit hours) to be designed and offered (open also to students not taking the minor.) This course would offer an overview, including the following topics:

**The Natural Environment:** the land and resources, the oceans, the atmosphere, the cities, pollution (air, visual, water, audial), food and population ** energy, science and technology

**The Social Environment:** food and population ** organizations (social, religious, political) communications, transportation, education, human values, the quality of life (** will be discussed from both aspects)

Three hours of coursework would be in one-hour segments, for developing skills and introduction to other resources which are available (speakers, etc.)
ADMINISTRATION: A Board of Study will be set up for the administration of the minor. This Board will:

Select new members
Screen courses
Revise the program if necessary
Act as advisors
Disseminate information to faculty and students
Evaluate program
Maintain records.

ADVISEMENT: Cohesion in the minor would be provided by the three one-credit hour courses, by careful selection of courses to be offered, by lecturers and other resource persons, and by the required advisement. The students will be required to complete at least one environmental course, one resource or conservation course, and one human values/quality of life course. This diversity, in addition to the survey course and exposure to other resources through the one-hour courses, should provide students with a cohesive, significant learning experience.
REQUIREMENTS FOR THE MINOR IN FUTURE STUDIES

18 hours of approved courses, including the following:

FTR 200 Introduction to Futures Studies
(cross-listed with GGR 111 for Fall, 1978) 3 hours
FTR 201 Futures I 1 hour
FTR 202 Futures II 1 hour
FTR 203 Futures III 1 hour

The additional hours will come from a list of approved courses. (The courses listed here under Appendix A, II are approved for this. Others will be added.) 12 hours

18 hours

POSSIBLE SEQUENCE OF COURSES:

1st Semester: FTR 200 (GGR 111) + FTR 201 = 4 credit hours
2nd Semester: 1 required course* + FTR 202 = 4 credit hours
3rd Semester: 1 required course** + FTR 203 = 4 credit hours

To complete minor: 1 required course* + 3 credit hours
1 elective course = 3 credit hours

18

(*)Required courses include 1 resource/conservation course, 1 environmental course, and 1 human values/quality of life course.)
RESEARCH COURSES

FTR 230 INTRODUCTION TO FUTURE STUDIES

I. Until such time as a survey course could be developed for the
Minor in Future Studies, the Committee recommends that a current
course, GEO 111 (Introduction to Geography) would be an acceptable
substitute. This course is described below:

This course attempts to place a wide range of current
and urgent concerns in a human-geographic context. Five
major issues are addressed: (1) population - numbers,
nutrition, health, and mobility; (2) culture - racial,
linguistic, religion, art, architecture, and music;
(3) settlement patterns - dwellings and villages, towns
and cities, and urban patterns; (4) livelihood patterns -
ancient methods, modern farming, and the industrializing
world; and (5) a political mosaic - evolution of the state
system, spatial expressions of the state system, the lost
frontier, and state and collective behavior.

The Committee feels that successful completion of this course would
provide students in the Minor in Future Studies with a basic under-
standing. They would then proceed to take an additional fifteen
hours of coursework which would build on knowledge and awarenesses
developed in the above course.

The Department of Geography has discussed this possibility, and is
willing to commit the resources needed for inclusion of this course
in the Minor (see attached.)
FTR 201 FUTURES I

This eight-week course will help students who are beginning the Future Studies minor to acquire necessary skills as they enter the minor. These skills include library research skills, terms and theories of basic statistics and logic, and decision-making. Acquisition of each of these skills will involve a future-oriented learning method. Lectures and independent study will also be involved. The student will choose one issue (such as food and population, energy resources) and, using the skills gained, will make recommendations for the future.

FTR 202 FUTURES II

This semester-long course will use lecturers, films, field trips and other resources to provide cohesion in the Future Studies minor and to integrate work done in other courses. During the course of the semester, four-five major issues dealing with the future will be researched and discussed. By utilizing speakers invited on campus specifically for this purpose (and others as appropriate), and the many resources to be found in the Rochester area, an in-depth study of these issues will be made. A heightened awareness of the current worldwide issues and problems, and a concern for the future of mankind, are expected results of this course.

FTR 203 FUTURES III

An extension of FTR 202, this semester-long course will ordinarily follow completion of FTR 202. However, different issues
dealing with the future will be researched and discussed. By utilizing speakers invited on campus specifically for this purpose (and others as appropriate), and the many resources to be found in the Rochester area, an in-depth study of these issues will be made. The interrelatedness of the eight-ten major issues will be especially emphasized, and the student, after completion of this course, will be better able to draw conclusions, reach decisions and make recommendations for the future.
PRELIMINARY LIST OF APPROVED COURSES

II. A preliminary survey of courses which are currently offered at Brockport indicates that there are many which, with advisement, would provide an adequate minor course of study. A listing of some of these courses (all offered in Fall, 1977 and/or Spring, 1978) follows: (*-resource/conservation; **-environmental; ***-human values/quality of life)

GEL 300 - Earth and Man **
Study of effects of earth and man on each other. Earth materials and processes. Implications of earth sciences on society and its development. Discussion of land use, water resources, earthquakes, and other catastrophic events and their relationship to existence of man.

AST 301 - Man in Space **
A survey of selected topics on which man's exploration of space would seem to depend. The course will include a consideration of man's state of readiness for such endeavors; the suitability of the earth as a launching pad for such explorations; the promise and prospect of discovery that lies waiting in the near spaces of our own solar system and the deep spaces between the distant stars with particular emphasis on man's prospects for establishing physical or communication contact with other intelligent societies.

BIO 366 - Man and His Environment **
Issues and action-oriented course concerned with discussion and understanding of man and his environmental problems. Includes human ecological problems, behavior, population characteristics, resource limitations, and potential routes for personal involvement.

BIO 243 - Genetics and Human Values ***
The course is designed to introduce the student to the principles of human genetics. Emphasis will be placed on advances in modern genetics and their impact on human culture. Topics include genetic disease and gene therapy, therapeutic abortion, genetic screening, genetic counseling, cloning and genetic engineering.

GEL 204 - The Minerals Business *
The course is designed to treat the problems of mineral supply, use, and conservation that will face the nation in the next fifty years. The economic, governmental, and environmental factors that affect the development and exploitation of mineral resources in a free society will be explored, and investigations will be made of how mineral materials are used to feed, clothe, and house our ever-increasing population and to sustain virtually all productive industry. Of special concern will be the effect of global politics on the supply and demand of mineral commodities and the effect of expanding governmental regulation on the mineral industry.
GGR 313 - Energy
This course is designed to provide a broad introduction to the social, economic, political, and technical aspects of man's use of energy. Taking a geographic point of view, the course traces the history of energy use, describes the dimensions of contemporary energy problems, and discusses possible alternative energy futures.

PHS 320 - Energy Sources, Supply and Conservation
This course will introduce the scientific background to the energy problem, discuss current and alternative energy sources, and evaluate present usage and need for conservation.

ESC 425 - Solar Energy
A study of solar energy: its availability on daily, seasonal, and geographical bases, means of intercepting and absorbing solar energy, problems of absorbing, transporting and storing energy obtained via solar radiation.

ESC 427 - Nuclear Energy
Survey of the development of nuclear power for civilian use in the U.S., including: government energy policy evolution; nature of radioactivity, nuclear fission, and nuclear fusion; types of nuclear power reactors; assessment of nuclear fuel resources; problems of waste disposal, reactor malfunctions, radiation effects, and weapons proliferation; discussion of future utilization of nuclear power.

ESC 426 - Energy: Petroleum Resources
An examination of one of our major energy resources: oil and natural gas. Includes the origin, development, environmental implications, and future prospects for oil, gas, tar sand, and oil shale.

HLS 303 - Ecological Relations
Concentrates on understanding of reciprocal relationships between man and his various environments. More specifically, man's relationship with man, man's relationship to technology, and man's relationship to environment.

GGR 216 - Urban Systems
The major concern of GGR 216 is to familiarize the student with basic city patterns that develop from the interaction of people over time and space.

GGR 471 - Man's Impact on the Environment
The goal of this class is to help the student develop his methods of researching timely material (i.e., environmental problems), and presenting those materials in an ordered fashion to be discussed and criticized by fellow students. Students are encouraged to relate their own major subjects to the class as they apply to environmental problems.
SOC 501 - Population and Society **
Analysis and interpretation of population characteristics and processes such as size, growth, change, structure, mortality, fertility, migration, etc.

GSE 490 - You and Utopia ***
The course is designed to force a student to look at different world views which are considered "Utopian" or ideal. Starting with Plato's Republic, we will discuss the role of the citizen in society in terms of his/her obligations to self and others. Using contemporary Utopian visions, we will attempt to integrate the person with his/her academic field, with his/her role in contributing to the world of the future.

GPE 480 - Urbanization **
What has been the role of the city in human history? Many scholars have emphasized the transition of human society from hunting and gathering activities to more modern forms of organization. An important part of this transition has been the development of an urban society. City dwelling has been, perhaps, the most significant factor of the civilizing process. Whether one views urban progress in such diverse areas as agriculture, architecture, the arts, literature, and the other bureaucratic and institutional dimensions, we fail to recognize the role of the city as a vehicle for civilizations progress. A major exploration of the evolution of urban society will be attempted in this course. In addition to this, substantial attention will be given to the significance of the city for man's pursuit of and achievement of the basic goals which are attendant to the development of modern society. Emphasis will also be placed upon the current state of cities, their problems as defined by such concepts as the urban crisis, and their future prospects as vehicles of progress in the human landscape.

257 430 - American Institutions in the Global Community **
This course will be an interdisciplinary seminar. The major focus of the seminar will be on American economic and educational institutions. Of particular concern will be the rise of multi-national corporations and their domestic and global consequences.

EXL 477 - Speculative and Science Fiction ***
Course surveys the history of the genre from ancient times to the present, concentrating on selected examples of noted speculative and science fiction. The main thrust of the course will be an examination in depth of the main moral, ethical, and intellectual implications of the world's best speculative and science fiction. The objectives of the course are to acquaint students with the major trends and developments in speculative and science fiction from ancient times to the present.
III. The Committee feels that adoption of the proposal would lead to development of more futures-oriented courses. Three such courses have already been suggested, including one course in the Social Sciences area; one dealing with natural laws and phenomena, the physical and biological basis for human interactions, centered around world ecosystem energy flow and related phenomena; and one dealing with decision-making.

In addition, approval of the minor will encourage departments to review current courses or design new courses for inclusion. All departments will be recontacted. Following receipt of adequate descriptions, the Committee will review these additional courses for inclusion in the Minor in Future Studies.
Professor James W. Newton after consultation with various members of the Committee for Minor and Future Studies relayed to me that GGR 111 (Introduction to Geography) appears to be a suitable course for inclusion in the Future Studies Program. Introduction to Geography has been completely revised in order to examine current and future problems confronting mankind.

The textbook selected for this course, Human Geography: Cultural, Society, and Space by Dr. Harri deBlij, is problem oriented and is deeply committed to examining the coming crises facing mankind. Professor James Newton will bring copies of this textbook with him to the next meeting of the Committee for your perusal.

The Department is more than willing to commit the necessary resources to make the inclusion of this course in your program possible.

Sincerely,

Kennard W. Rumage
Chairperson