Intellectual Foundations

Final Report to the College Senate from the

College Senate Instruction and Research Committee

March 2004

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I. Charge to Committee

At its March 14, 2003 meeting, the Senate endorsed the creation of the Special General Education Select Committee. The charge of the committee was to continue the college's quest to improve our General Education program by preserving as much as possible of the substance of the General Education Select Committee's proposal (known as the Blue Book) while taking into account the feedback that has been received from the College population on the redesign of the General Education Program.

The report from the Special General Education Select Committee was then given to the College Senate Instruction and Research Committee for a final revision process. The I&R version will be considered and voted on in the College Senate in spring 2004

II. Rationale and Basic Structure of the Intellectual Foundations Program

1. Overview

The Intellectual Foundations Program is designed to transform the existing General Education Requirement at the College from a distribution requirement, driven by faith in exposure through arbitrary sampling, to a liberal arts program of study that is organized around learning outcomes and a less complicated structure. As a college-wide program, it should provide students with a common and shared intellectual experience, encourage integration and synthesis among disciplines, and provide a learning experience that promotes intellectual growth. Because it is a college-wide program, no part of the program should "belong" to a division or department, but instead, the structure, delivery and governance should be the purview of the entire campus community.

The curriculum of the Intellectual Foundations Program is organized on a simple hierarchy of course work, beginning with an introductory course (BSC 100) that introduces students to the characteristics of the cognate areas commonly associated with liberal arts, and provides a framework for the application of critical thinking in the cognate areas. Students will also take courses in the Cognate Areas (Foundations), American History, Civilizations, Writing, Oral Communication, Foreign Language, Mathematics and Quantitative Reasoning, Technology, and Diversity.

The overall goal of the program is to promote an understanding of the continuity of human history, the depth of inherited knowledge, the validity of diverse modes of inquiry, the value of artistic expression and the richness of our collective experience as human beings. The purpose of the program is to develop the skills and habits of mind required for a life of intellectual curiosity and civic engagement.

2. Comparison of Intellectual Foundations Proposal with GE2K

(All superscript numbers refer to notes following this chart.)

(All superscript numbers refer t Intellectual Foundations		General Education 2000 (GE2K)		
Requirement	Credits	Requirement Credits		
Shared Intellectual Experience: All College Requirement		Shared Intellectual Experience		
BSC 100/300 Foundations of Inquiry ¹	3			
Cognate Foundations		Core		
_		Applied Science & Tech Core (CT)	6	
Arts Foundations	6 ²	Arts Core (R) 6		
Humanities Foundations	6 ²	Humanities Core (U) 6		
Natural Sciences Foundations	6 ²	Natural Sciences Core (N)	6	
Social Sciences Foundations	6 ²	Social Sciences Core (O)		
Foundations of Civilizations		Civilizations		
American History	3 ²	American History (V1)	3	
Foundations of Civilizations (C)	6 ²	Western Civilization (V2)	3	
		Other World Civilizations (V3)	3	
Additional Credit Requirements		Additional Credit Requirements		
Basic Writing ENG 101 & 102	3-6	Basic Writing ENG 101 & 102		
Writing-across-the-Curriculum (W)	63	Writing-across-the-Curriculum (W)		
Mathematics/Quantitative Reasoning	34	Math/Quantitative Reasoning (Z)		
Technology (T)	3 ²			
Foreign Language	0-64	Foreign Language	0-12 ²	
Basic Oral Communication (P)	33	Basic Oral Communication 0 ⁷		
Diversity (D)	3 ³	Diversity (D) 3 ³		
Information Management	05	Information Management 0 ⁵		
Critical Thinking	06	Critical Thinking 0 ⁶		
Culminating Experience		Culminating Experience		
BSC 400, for future consideration	3 ⁷	_		
CREDIT TOTAL	57-66	CREDIT TOTAL	CREDIT TOTAL 51-72	

- 1. All BSC students are required to take BSC 100 or 300 (in the case of transfer students)
- 2. Three credits can come from the student's major.
- 3. In most cases, students double-dip using courses in their major.
- 4. These all college requirements may be met through various options. (See requirement)

- 5. Information management is infused into majors. In the IF program this competency is addressed in BSC 100 as well.
- 6. Minimum SUNY requirements for critical thinking are fulfilled by BSC 100 or BSC 300.
- 7. Refer to section III M.

III. Curricular Components of the Intellectual Foundations Program

A. Foundations of Inquiry (BSC 100 and BSC 300)

1. Overview of BSC 100

All entering students with fewer than 65 transfer credits shall be required to complete successfully Foundations of Inquiry (BSC 100) during their first year. This course is an intellectual experience to be shared by Buffalo State students. It will prepare students to be critical and engaged learners throughout the rest of the program. It is expected that BSC 100 will be taught by full-time faculty (with few exceptions). (See Appendix F for a Model BSC 100 Course Proposal.)

2. Overview of BSC 300

BSC 300 will provide an enhanced BSC 100 experience for transfer students with 65 or more transfer credits. This will ensure that all BSC graduates will have as much of a shared college experience as is realistically possible. Thus the course will cover the same material of BSC 100 and have the same learning outcomes/objectives but at a level commensurate with the upper level designation and the additional academic preparation of transfer students compared to incoming freshmen.

3. Proposed Learning Outcomes/Objectives for BSC 100 and BSC 300

Through a shared set of materials, students will:

- a. identify the benefits of a liberal arts and sciences education;
- b. apply critical and creative thinking skills;
- c. identify, analyze, and evaluate arguments;
- d. develop well-reasoned arguments in topics related to the arts, humanities, natural sciences and social sciences;
- e. demonstrate the ability to think critically about their own values and beliefs;
- f. demonstrate an understanding of the value of diverse modes of inquiry;
- g. demonstrate a basic ability to use the BSC computing environment in academic research.

Intellectual Foundations Source Materials* for BSC 100 and BSC 300

The collection of readings and other materials will be organized based on two major areas:

- A. The Meaning and Value of a Liberal Arts Education: This section will contain two or three items whose content is aimed at providing:
 - an understanding of the concept of liberal arts.
 - an understanding of the value of a liberal arts education.
 - an understanding of how the liberal arts have historically come to be organized into major

knowledge areas such as Arts, Humanities, Natural Sciences, and Social Sciences.

The purpose of this section of the source book is to provide a reference framework for the Cognate Foundation Area materials.

- B. Cognate Foundation Area Materials: The readings and other materials in this section will be organized according to the four cognate foundations areas. It is envisioned that each cognate area will contain a section of four to six readings and other materials that:
 - address issues reflecting the domain and intellectual perspectives of the disciplines commonly associated with the cognate area.
 - reinforce understanding of the different perspectives and domains of the cognate areas.
 - provide textual material for the application of critical thinking in a variety of intellectual traditions.

*Source Materials: Contributions to the source materials can include: Essays, treatises, academic journals, magazines, newspapers, excerpts from books (fiction or nonfiction), internet resources, audio, visual and technology-mediated sources.

Purpose of the Source Materials:

- a. To provide the student with an understanding and appreciation of a liberal arts perspective.
- b. To understand how and why the liberal arts perspective is organized around a set of cognate areas.
- c. To provide textual and other sources to which the student can apply essential critical thinking skills in a variety of contexts and intellectual traditions (cognate areas).
- d. To provide examples of diverse modes of inquiry.

B. Cognate Foundations

1. Overview

All students, except those exempted from general education by a current articulation agreement, shall be required to complete six credits in each of four cognate areas, Arts, Humanities, Natural Sciences and Social Sciences.

- a. Students must take courses from two distinct disciplines (prefixes) within each cognate area. Two interdisciplinary courses with the same prefix (e.g., HUM) may fulfill this requirement within a single disciplinary area, providing they have been approved for this purpose by the Senate Intellectual Foundations Oversight Committee (SIFOC). (See Section IV.-B. for a definition and description of SIFOC.)
- b. "Double Dipping:" Each student may select one course from the Cognate Foundations, or American History or Civilizations areas (up to 4 credits total) in her or his major to fulfill both a major requirement and an Intellectual Foundations requirement.

2. Course Guidelines

a. Courses shall be considered for inclusion in each cognate area based upon course content and learning outcomes rather than home department. Therefore, courses offered by any

- department may be approved in any category for which they meet the learning outcomes. No courses will be "grand-fathered" into Cognate Foundations.
- b. Clear, content-based criteria for inclusion (and exclusion) of courses shall be developed by SIFOC for each cognate area. The criteria will meet SUNY Trustees' learning outcomes. It is expected that these courses will reinforce critical thinking skills.
- c. In no case shall a course whose main purpose is professional training be included in any IF category. This shall not be construed to exclude courses simply because they originate from departments whose programs may be characterized as professional training.
- d. All courses in each Cognate area must include all learning outcomes, and meet all criteria for inclusion in that area. There will be a unified list for each Cognate area rather than the List A and List B for each area under Buffalo State's GE2K.
- e. Only lower-level courses will be allowed in the Cognate Foundations areas. Students will be encouraged to complete all of their cognate foundational requirements before their junior year.
- f. Courses may be included in only one category of Cognate Foundations or Foundations of Civilization, but not both (e.g., a course cannot be both a Foundational course in Social Sciences and American History).

C. American History

1. Overview

Students will be required to complete one course that conveys the basic narrative of American History in its many dimensions. A significant portion of each course in this category shall address the learning outcomes of the diversity category in the Intellectual Foundations program (see section K).

2. Course Guidelines

- a. Courses, at a minimum, must meet all Trustees' learning outcomes for American history foundation courses.
- b. All foundation courses in American History must be lower division.
- c. American History foundation courses may not be listed in any other IF category (e.g., Cognate Foundations or Civilizations).

D. Civilizations

1. Overview

Courses in this category will directly compare and contrast important aspects of Western and other civilizations by discussing each in the context of the other. Students will be required to take two, three-credit courses, a single six-credit course or a six-credit cluster or sequence of courses designated with a "C" as Civilizations courses. Within the context of comparative-based civilizations learning outcomes, it is anticipated that all Faculties and many Departments may offer courses in this category. Because of the higher level of intellectual skills required for a comparative course, it is anticipated that many courses in this category will be upper-division and may include Cognate Foundations or American History foundation courses as prerequisites.

2. Learning Outcomes

Students will

- a. Demonstrate knowledge of history, institutions, economy, society or culture of Western civilization and at least one non-Western civilization.
- b. Demonstrate understanding of the interrelationships among history, institutions, economy, society or culture of a given civilization.
- c. Demonstrate understanding of the interrelationships among different world civilizations, both Western and non-Western.
- d. Be able to respond inquisitively, critically, and respectfully to information and ideas from their own and other cultures.

3. Course Guidelines

- a. Courses must meet all Trustees' learning outcomes for both Western and Other World Civilizations.
- b. Courses may be structured either historically or thematically.
- c. The non-Western component of a course may focus on a single non-Western civilization or cover a broader spectrum as appropriate to the theme or chronology of the course.
- d. The course interrelates the development of Western and non-Western civilizations.
- e. The Civilizations requirement may be fulfilled by two, 3-credit linked courses, or a single sixcredit course. Such linked or combined courses must meet all learning outcomes for both Western and Other World Civilizations.
- f. Prerequisites for all lower level civilizations courses shall be BSC 100: Foundations for Inquiry. Upper level civilizations courses shall require junior/senior status.

E. Basic Writing (ENG 101 & 102)

1. Overview

This requirement has not been altered from GE2K; students are required to take two basic writing courses, ENG 101 and ENG 102.

F. Writing across the Curriculum (W)

1. Overview

As in GE2K, students are required to take two writing-across-the-curriculum courses designated with a "W". All "W" courses will require the successful completion of ENG 102.

G. Mathematics and Quantitative Reasoning (M)

1. Overview

Students are required to complete successfully one course that meets the Mathematics and Quantitative Reasoning learning outcomes (listed below). This course should extend and develop students' abilities in (i) problem solving and abstract reasoning and/or (ii) statistical analysis and reasoning. Courses meeting the Mathematics and Quantitative Reasoning learning outcomes will be

designated with an "M".

NOTE: Students must demonstrate basic proficiency in mathematics prior to registering for a course designated with an "M". Proficiency may be demonstrated by any one of the following: (a) successful completion of three years of high school mathematics; (b) a math SAT score of 460 or a math ACT score of 16; or (c) previous college course work equivalent to MAT 097 or MAT 098 or beyond. If none of these requirements are met, then MAT 097 or MAT 098 must be successfully completed prior to registering for a course designated with an "M".

2. Learning Outcomes

Students completing courses designated with an "M" will meet the outcomes listed below in (i) or (ii).

(i) Problem Solving and Abstract Reasoning

These courses foster conceptual understanding and strengthen abilities to represent known relationships using algebraic and geometric models. Specifically, major course objectives include developing abilities to represent phenomena of the physical world in abstract, symbolic form, and to understand logical relationships and reasoning in the solution of the problems.

(ii) Statistical Analysis and Reasoning

These courses introduce quantitative methods and strengthen skills needed to critically evaluate numerically-based arguments and assertions through geometric models. Specifically, major course objectives include developing abilities for describing sets of numerical data, for drawing valid and meaningful inferences and conclusions from data, and for measuring the validity of such conclusions.

H. Technology (T)

1. Overview

The goal of the Technology requirement is to increase student awareness of the impact of technology on societies, professions and cultures as well as of technology's role in the advancement of knowledge.

The development of technologies to change and understand the world, whether iron tools or silicon chips, is a distinctly human accomplishment. In changing our world we also affect ourselves and our relations to one another, forcing changes in how we understand, express and make sense of our humanity. Such changes are not always beneficial and can be hard to detect. Recognizing, understanding and mastering this kind of change in the human experience are all essential to a life of intellectual curiosity and civic engagement.

A course with a "T" designation will do one or more of the following:

- a. Ensure that course learning outcomes provide perspectives of technology's impact on the human condition.
- b. Explore the impact of a technology or technologies at a particular moment in time.
- c. Provide a comparison of technologies among cultures or historical periods.

Students shall take one course that meets the Technology learning outcomes (listed below)

emphasizing the role technology plays throughout the human experience. Courses meeting the technology learning outcomes shall be designated with a "T" in the course schedule and catalog. It is anticipated that courses from other areas in the Intellectual Foundations program may **also** fulfill the technology requirement. Further, it is understood that there will be no prerequisites for "T" courses.

Learning Outcomes

After completing this requirement students should be able to:

- a. Articulate examples of technology (ies) as it relates to one or more of the goals.
- b. Analyze the effects of technology on the human condition.
- c. Demonstrate how technology has been used for problem solving

I. Foreign Language

1. Overview

Students will take **two** courses in Foreign Language in accordance with the Board of Trustees standard. Both B.A. and B.S. degrees will require completion of two semesters of a foreign language. The SUNY Trustees treat the Foreign Language requirement as a proficiency. A student may demonstrate proficiency by presenting high school or other exam results.

2. Learning Outcomes

Students will demonstrate:

- a. Basic proficiency in the understanding and use of a foreign language.
- b. Knowledge of the distinctive features of culture(s) associated with the language they are studying.

NOTE: Options for demonstrating fulfillment of the learning outcomes:

- 1. Successfully complete the 102 level of a language.
- 2. Show on his/her high school record that she or he has passed the Regent's exam with a score of at least 85%. (If his/her score was under 85%, he or she may complete the language requirement by passing a single 1-credit Foreign Language Across the Curriculum course.)
- 3. Demonstrate 102 level proficiency on one of our placement tests.
- 4 Receive 6 credits on the CLEP test.

J. Basic Oral Communication (P)

1. Overview

Students will fulfill the SUNY oral communication learning outcomes by taking a designated "P" course.

2. Learning Outcomes

Students will:

- a. Develop proficiency in oral discourse
- b. Evaluate an oral presentation according to established criteria.

K. Diversity (D)

1. Overview

Students shall take one course that meets the diversity learning outcomes listed below, in addition to the Foundations of American History and the two Civilizations courses. Courses meeting the diversity learning outcomes shall be designated with a "D".

The diversity requirement seeks to increase students' awareness of pluralism in the US. These courses accomplish this through study of history, culture, creative production and/or contemporary experiences of traditionally underrepresented populations. The diversity requirement also seeks to explore prejudice, bigotry, and stereotyping in an academic forum.

2. Learning Outcomes

After completing this requirement, students will be able to:

- a. Discuss concepts of diversity, discrimination, prejudice and oppression.
- b. Analyze personal attitudes and behaviors and their effects on others.
- c. Demonstrate an understanding of the manners in which institutional structures have traditionally disempowered populations and perpetuated inequality.
- d. Articulate the experiences of one or more traditionally underrepresented groups.
- e. Summarize and explain how components of identity interact with groups and impact on the movement toward social justice.

L. Critical Thinking and Information Management

1. Overview

The SUNY Trustees require students to demonstrate basic competency in Critical Thinking and Information Management. These have been infused throughout the Intellectual Foundations program, and especially in BSC 100 and BSC 300. It is anticipated that all majors will have learning outcomes in both these areas that exceed the basic competencies outlined by the SUNY Trustees.

2. Critical Thinking Learning Outcomes

There are three "critical thinking" learning outcomes mandated by the SUNY Trustees.

- a. Students will locate, evaluate and synthesize information from a variety of sources.
- b. Students will identify, analyze and evaluate arguments as they occur in their own and others' work.
- c. Students will develop well-reasoned arguments.

Critical thinking shall be explicitly addressed in the learning outcomes for BSC 100, all of the

Cognate Foundations and in BSC 300. It is also to be infused throughout every major offered at Buffalo State. The Committee interpreted the SUNY requirement to be a minimum. Therefore, for the purposes of the SUNY Trustees' general education mandate, all critical thinking requirements are met through the Intellectual Foundations program. The critical thinking skills infused throughout majors should involve higher order critical thinking beyond those required by the SUNY Trustees.

3. Information Management Learning Outcomes

There are two "information management" learning outcomes mandated by the SUNY Trustees.

Students will demonstrate the basic operations of personal computer use. Students will understand and use basic research techniques.

The key word in both learning outcomes is "basic." Basic research is an extension of critical thinking and as such is addressed in BSC 100 and BSC 300. "Advanced" research techniques are infused in every major offered at Buffalo State.

M. BSC 400, for future consideration

1. Overview

Due to fiscal/resource constraints, a required capstone course is not recommended at this time. However, this issue should be examined at a future date. Further, one suggested option for consideration would be a required course (BSC 400) in each major that would link the students' major course of study with their Gen Ed experience.

IV. Governance Structure

A. General Guidelines

The governance body should:

- 1. reflect the fact that the Intellectual Foundations Program is a college-wide program. Neither it, nor any of its parts, is the territory of a particular department or Faculty.
- 2. separate program implementation from the curricular deliberation and approval processes.
- 3. preserve the existing curricular decision-making authority of the College Senate.
- 4. establish transitional processes that expedite the approval process while preserving program integrity and process fairness. Courses will not be "grandfathered" into any category.

B. Senate Intellectual Foundations Oversight Committee (SIFOC)

The Senate Intellectual Foundations Oversight Committee (SIFOC) shall operate as a subunit of the Senate Curriculum Committee.

SIFOC Responsibilities

- 1. Articulate and publish its bylaws.
- 2. Review all curricular and policy questions concerning the Intellectual Foundations Program and make recommendations to the Senate Curriculum Committee.
 - a. Proposals for new courses, course revisions and topics courses for any IF category and for BSC prefixes in the IF program shall be submitted to the Senate Curriculum Committee which shall refer them directly to the SIFOC. The SIFOC shall submit its recommendations to the Senate Curriculum Committee.
 - b. The SIFOC shall recommend actions for both course approval and appropriateness for inclusion in any IF category, and for BSC prefixes in the IF program.
- 3. Assist and cooperate with the Intellectual Foundations Center (IFC) in IF program review. It will forward to the IFC its curricular concerns and questions for inclusion in the program review.
- 4. All committee recommendations shall be subject to review and appeal to the Senate Curriculum Committee according to existing Curriculum Committee guidelines and procedures.
- 5. The SIFOC will solicit input from the appropriate ad hoc committees (refer to section V).

SIFOC Committee Membership

- 1. Two representatives elected from each Faculty to three-year terms (6 members).
- 2. One representative from the library elected by the library faculty (1 member).
- 3. One elected professional staff from the academic support areas (1 member).
- 4. Provost or the Provost's designee(s) (non-voting, ex officio, administrative liaison).
- 5. Director of the Center for Interdisciplinary Studies (1 non-voting, ex officio member).
- 6. Director of the Intellectual Foundations Center (continuing committee chair).
- 7. Senate Curriculum Committee Chair or their designee (1 non-voting, ex officio member).

C. Intellectual Foundations Center (IFC)

The Intellectual Foundations Center (IFC) shall carry primary responsibility for implementing the Intellectual Foundations Program.

1. IFC Responsibilities

- a. Coordinate Intellectual Foundations Program delivery and assessment
- b. Coordinate faculty from departments to teach in the Intellectual Foundations Program.
- c. Respond to curricular needs by encouraging development of new courses or revision of existing courses.
- d. Assist in implementing the First Year Program (with others in academic support areas, Student Affairs, Center for Interdisciplinary Studies and academic departments).
- e. Conduct an Intellectual Foundations Program review every 5 years, with SIFOC input. This program review will include program self study & external review. This review shall elicit input from the relevant teaching faculty, professional staff and academic departments. It shall include review of learning outcomes, criteria for inclusion of courses in the IF program, and pre-collegiate proficiency standards. The IF Program review shall be forwarded with recommendations to the College Senate via the SIFOC and College Senate Curriculum

Committee.

- f. Convene meetings as necessary with the appropriate faculty, professional staff and administrators.
- g. Organize the development and regular revision of the IF materials.
- h. The director will administer faculty and course development funds in collaboration with Academic Affairs.

2. IFC Structure

- a. A director with a stipend to coordinate and organize IFC activities and responsibilities drawn from the faculty. Reports to the Provost or the Provost's designee.
 - 1) Recommendations for filling this position shall be made to the Provost by a search committee consisting of the following members of the SIFOC: all six representatives elected by the Faculties, the professional staff representative from the academic support areas and the library faculty representative.
 - 2) The IFC Director shall serve for a term of three years and must be evaluated by the search committee of the SIFOC by published rules of its own devising. The term may be renewed.
- b. Appropriate secretarial support.

3. IFC Membership

Membership shall include all faculty/professional staff who have IF instructional responsibilities as well as by self-nomination.

D. Transitional Processes

- 1. Appointment of Interim Coordinator of the IF Center will be made by the President, or her designee, in consultation with the Chair of the College Senate. This will be the only time this process will be used.
- 2. By-laws for the IFC shall be written and approved by a majority of IFC members and submitted to the Provost for approval.
- 3. Interim faculty representatives on the SIFOC shall be appointed by the chairs of each Faculty, a representative from the library shall be appointed by the library director, and a professional staff representative from the academic support areas shall be appointed by the Associate V.P. for Undergraduate Education and its membership ratified by the College Senate. Interim representatives shall be replaced by duly elected members as soon as possible.
- 4. Immediately upon its formation, the SIFOC shall convene *ad hoc* committees to review the learning outcomes, criteria for course inclusion and, where relevant, pre-collegiate proficiency standards in each IF category.
- 5. Membership in each *ad hoc* Committee shall include a representative elected from each department and academic support unit with an interest in reviewing learning outcomes and/or criteria for course inclusion and pre-collegiate proficiency standards in the relevant IF category.

V. SIFOC Ad Hoc Committees

1. Overview

The SIFOC shall form *ad hoc* committees for each of the required elements of the Intellectual Foundations program that have non-zero credit requirements (all, except for Information Management and Critical Thinking). These committees are to make recommendations to the SIFOC during the transition period pursuant to implementation of the Intellectual Foundations Program. The membership composition of these committees should include faculty representatives with the appropriate expertise.

2. Charges For All Ad Hoc Committees

- a. Review and revise the existing and/or proposed Learning Outcomes/Objectives.
- b. All Committee recommendations are subject to ratification by the SIFOC and may be appealed, via the SIFOC, to the College Senate Curriculum Committee.

3. Additional Charges for:

Cognate Areas, American History, Foundations of Civilization, Oral Communication, Technology and Diversity

- a. Ensure that level-appropriate critical-thinking learning outcomes are clearly and explicitly included among the learning outcomes for courses.
- b. Ensure that content-based criteria for inclusion (and exclusion) of courses make no reference to the administrative structure (e.g. Department or Faculty) at Buffalo State College or elsewhere.

Foreign Language, and Mathematics and Quantitative Reasoning

Determine the options, including the minimum Regents exam scores along with other minimum, pre-college criteria for, and means of determining proficiency.

Written Communication

- a. Ensure that critical-thinking learning outcomes are clearly and explicitly among the course learning outcomes.
- b. Ensure that learning outcomes for ENG 101, ENG 102, and "W" courses are clearly distinguished.

VI. Appendices

A. Members of the General Education Select Committee (Spring, 2001-Spring 2003)

Name Department

Mark Bausili Registrar
Dewayne Beery Physics
Pat Dexter Social Work

Linda Gleckel NCATE Coordinator

Cheryl Hamilton Art Education
George Hole Philosophy
David Hunter Philosophy

Gary Jones Speech-Language Pathology

Douglas Koritz, Committee Chair Economics & Finance

Rosalyn Lindner Academic Information & Assessment

Stacey McGirr Anthropology Major

Wendy Paterson Elementary Education & Reading

Alex Ratkowski Economics & Finance
Greg Reish Performing Arts

Al Riess Library

Kerran Sanger Center for Interdisciplinary Studies

Lori Till Hospitality Administration

Greg Wadsworth, Committee Chair Biology

B. Members of the Special General Education Select Committee (Summer 2003)

Name Department Philosophy

Karen Johnson Success Track Academic Readiness

Gary Jones Speech-Language Pathology

Susan Leist English

Perri Litton Psychology Major
Stacey McGirr Anthropology Major

Roswell Park Academic Support Programs
Wendy Patterson Elementary Education & Reading

Ron Rabin Communication
Alex Ratkowski Economics & Finance

Howard Reid, Committee Chair Psychology
Cherry Searle Technology

C. Members of the Final Committee (2003-2004)

The 2003-2004 College Senate Instruction and Research Committee was responsible for the final version of this proposal brought to the College Senate on March 12, 2004.

NameDepartmentDavid HunterPhilosophySusan LeistEnglishIlya Grinberg *TechnologyCheryl AlbersSociologyGloria EastmanEnglish

Richard Engelhardt Professional Staff

Nancy Frazier Librarian

Warren Gleckel Exceptional Education

Michael MacLean Psychology

Melaine Kenyon Professional Staff

Terence McDonald CADET
Sue McMillen Mathematics
Andrew Nicholls History
Alex Ratkowski Economics

Lucy Schwartz Modern and Classical Languages

Steven Thorne Earth Science
Molly Zeigler Student Member

D. Implementation

Activities & Tasks	Initiator or Convener	
Create Governance Structure		
Create Intellectual Foundations Center.	Academic Affairs	
Appoint Interim Director of Intellectual Foundations Center.	President via Academic Affairs	
Establish Intellectual Foundations Oversight Committee (IFOC).	College Senate, Interim Director of Intellectual Foundations Center	
Appoint Intellectual Foundations Faculty.	Interim Director of Intellectual Foundations Center, Deans & Departments	

^{*} Dr. Grinberg was periodically represented by Dr. Anthony Hotchkiss

Activities & Tasks	Initiator or Convener		
Recruit faculty to teach new courses.	Interim Director of Intellectual Foundations Center, Deans & Departments with Academic Affairs		
Convene ad hoc committees to review learning outcomes, inclusion criteria, and "testing-out" conditions	Intellectual Foundations Oversight Committee,		
Begin formal search (internal) for Director of Intellectual Foundations Center.	Academic Affairs		
Develop/Revise Curriculum			
Develop BSC 100 and BSC 300 courses.	Intellectual Foundations Faculty		
Collect Intellectual Foundations Support Material (Incommon course materials for BSC 100 and BSC 300.)	Intellectual Foundations Center		
Develop Intellectual Foundations Curriculum. Revise currently existing courses to meet criteria for inclusion.	Department Faculty, Intellectual Foundations Center		
Design new courses to address outcomes for Intellectual Foundations status.	Department Faculty, Intellectual Foundations Faculty		
Approve new course proposals/course revisions for the Intellectual Foundations Curriculum (Submit to Senate Curriculum Committee). Process through Senate Curriculum and Oversight Committees.	Intellectual Foundations Oversight Committee, Director of Intellectual Foundations Center		
Offer Faculty Development Opportunities			
Prepare Faculty to Teach New Courses via Professional Development Summer Workshops.	Academic Affairs Intellectual Foundations Center		
Offer Professional Development Summer Workshops. Prepare all faculty to assist students in achieving outcomes related to Board of Trustees outcomes, (e.g. oral comm.). Provide advisement workshops for Learning Communities and Freshmen Seminar instructors and for faculty teaching BSC 100, BSC 300 & Civilizations courses.	Academic Affairs, Intellectual Foundations Center		
Additional Changes			
Prepare audit system. Work with Registrar's Office to update audit system to reflect new requirements.	Registrar		

Activities & Tasks	Initiator or Convener	
Prepare accurate materials for advisement. Work with all constituencies on campus to revise advisement materials to reflect new Intellectual Foundations requirements.	Academic Affairs, Enrollment Support and Retention, Advisement, Orientation, Academic Departments	
Prepare new college catalog. All catalog copy needs to reflect the new requirements.	Director, Intellectual Foundations with Academic Affairs	
Implement new program.	Admissions, Advisement, Orientation, Academic Departments	
Update Recruiting/Public Relations Materials		
Update recruiting materials.	Admissions Office	

E. SUNY General Education Learning Outcomes

Guidelines for the Approval of State University of New York General Education Requirement Courses

For each State University General Education Requirement (SUNY-GER) category, the Task Force-defined learning outcomes are set out in plain text. Following each set of learning outcomes, guidelines for review and approval are set out in bold italicized text. The guidelines take into account the intentions of Board Resolution 98-241, and the PACGE's recommendations regarding the interpretation of the Task Force learning outcomes. The purpose of the guidelines is to provide transparency as to the expectations of the kinds of courses that may be approved in each of the SUNY-GER categories. They are not intended to constitute a logically exhaustive description of possible ways in which the learning outcomes can be met or evaluated. But it will generally be true that the further a given course is from obviously meeting the articulated guidelines, the less likely it may be approved for the category in question. It is anticipated that these guidelines will be subject to review, refinement and correction on an ongoing basis to account for shifts in disciplinary boundaries and feedback from campuses on a range of relevant issues.

I. KNOWLEDGE AND SKILL AREAS

1. MATHEMATICS

Students will show competence in the following quantitative reasoning skills:

arithmetic; algebra; geometry; data analysis; and quantitative reasoning;

Two kinds of courses have been judged consonant with the Task Force learning outcomes and the intention of the Board Resolution:

- (i) Math courses at or above the level of preparation for pre-calculus.
- (ii) Data analysis/quantitative reasoning courses that assume as a background the level of math prescribed by the first three of the learning outcomes. Examples of this latter kind of offering are statistics courses, and in some cases computer science courses.

If a student has passed the Regents Math Course III with a score of 85 or above, she may, at the discretion of the campus, be judged to have satisfied all the learning outcomes for this category.

2. NATURAL SCIENCES

Students will demonstrate:

understanding of the methods scientists use to explore natural phenomena, including observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of mathematical analysis; and application of scientific data, concepts, and models in one of the natural sciences.

For courses in the traditional natural science disciplines (e.g., chemistry, biology, physics, etc.) the inclusion of a laboratory component, though highly desirable, is not necessary for approval. For inter- or multi-disciplinary courses (e.g., environmental science, or the science portions of integrated curricula), or courses that fall outside the envelope of traditional natural science disciplines (e.g., psychology), submitted course information should demonstrate clearly:

how they use all the methods listed in the first student learning outcome for the natural sciences:

rationale for which discipline(s) in the natural sciences they draw on for concepts and models:

that the majority of the texts used fall clearly within the natural sciences.

3. SOCIAL SCIENCES

Students will demonstrate:

understanding of the methods social scientists use to explore social phenomena, including observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of mathematical and interpretive analysis; and knowledge of major concepts, models and issues of at least one discipline in the social sciences.

More than some other broadly defined discipline areas, the boundaries of the social sciences may vary significantly from campus to campus. In order to be approved for the social science category, submitted information should demonstrate clearly that the course provides a substantial introduction to an acknowledged social science discipline. For inter- or multi-disciplinary courses (e.g., women's studies, or the social science portions of integrated curricula), or courses that otherwise fall outside the envelope of traditional social science disciplines, submitted course information should demonstrate clearly:

- (i) how they teach understanding of social science methodologies;
- (ii) a rationale for which discipline(s) in the social sciences they draw on for concepts and models:
- (iii) that the majority of the texts used fall clearly within the social sciences.

4. AMERICAN HISTORY

Students will demonstrate:

- a. knowledge of a basic narrative of American history: political, economic, social, and cultural, including knowledge of unity and diversity in American society;
- b. knowledge of common institutions in American society and how they have affected different groups; and
- c. understanding of America's evolving relationship with the rest of the world.

To satisfy this SUNY-GER category, students must take either

- (i) a basic introduction to American History; or
- (ii) a more specialized course in American History (only if they scored 85 or above on the NYS American History and Government Regents Exam).
- A. Kinds of courses that are approvable for category (i):
 - 1. One half of the typical year-long survey of U.S. history.
 - 2. Introductions to American Government that document significant attention to historical context.
 - 3. American History courses with a somewhat narrower chronological focus that nevertheless provide enough historical context to cover a narrative equivalent to one semester of the U.S. History survey. Courses in 20 th century U.S. history, e.g., have been approved when it has been documented that there is significant coverage of the 19 th century context.
 - 4. Special theme courses that have as an explicit component the coverage of the basic narrative equivalent to one semester of the U.S. History survey. Examples of such courses are UGC 211 American Pluralism (Buffalo), and GEA 2000 American History, Society, and the Arts (Purchase). Both of these examples document the breadth of coverage of U.S. history by the use of a U.S. history textbook among the readings for the course.
- B. Kinds of courses that are approvable for category (ii):
 - 1. Virtually any American History course.
 - 2. Courses on American society and culture that adopt an ostensibly historical perspective and address in a significant way the 2 nd and 3 rd Task Force learning outcomes. These include, e.g., courses on the sociology of American institutions and/or minority groups.

Courses that focus narrowly on literature, philosophy, the arts, vel sim., would not normally be deemed to provide the breadth of coverage of U.S. history intended by the Board Resolution.

5. WESTERN CIVILIZATION

Students will:

demonstrate knowledge of the development of the distinctive features of the history, institutions, economy, society, culture, etc., of Western civilization; and relate the development of Western civilization to that of other regions of the world.

In addition to generic, eponymously titled, courses on the history of western civilization, courses that are more specialized,in either chronology or theme, may be approvable. Information submitted for such specialized courses would have to demonstrate

- (i) a focus on an aspect of western civilization that is reasonably construed
- as foundationally important; and
- (ii) relate that focus to the overall development of western civilization.

Thus, courses on specialized topics or periods, examples include: classical mythology, the Renaissance, the Bible, French civilization, the history of theater, are approvable so long as the materials submitted demonstrate that the primary focus of the course is related to larger cultural developments of western civilization. Courses that focus narrowly on particular authors or figures are generally not approvable, even if the authors in question should be very important ones. The operative idea is that the core of the course must be central to western civilization and that the treatment of that core must be placed in a broader cultural perspective, so that it could reasonably be said that students will gain an acquaintance with western civilization and not just a specialized knowledge of one narrowly defined topic.

6. OTHER WORLD CIVILIZATIONS

Students will demonstrate:

knowledge of either a broad outline of world history, or the distinctive features of the history, institutions, economy, society, culture, etc., of one non-Western civilization.

The intention of this category is to provide a counterpoint to the European focus of the Western Civilization requirement. Thus, approvable courses in this category must be either entirely or preponderantly non-European and non-US in focus. In addition to courses on the civilizations of Asia or Africa, this would, for example, allow courses on the histories of Latin America, the Caribbean, and/or indigenous peoples of the Americas.

7. HUMANITIES

Students will demonstrate:

knowledge of the conventions and methods of at least one of the humanities in addition to those encompassed by other knowledge areas required by the General Education program.

This category does not specify a particular humanities discipline or approach. In order to preserve the Task Force intention in splitting the original Humanities/Arts category in two, "performance" courses will generally not be approvable unless supported by documentation that they include a preponderance of scholarly humanistic study. Standard scholarly histories of the arts are approvable in both the Humanities and Arts categories. For inter- or multi-disciplinary courses whose scope does not obviously fall within the envelope of traditional humanistic disciplines (e.g., some communications offerings), submitted course information should demonstrate clearly:

a rationale for which humanities discipline(s) they draw on for conventions and methods; that the majority of the texts are within humanities disciplines.

8. THE ARTS

Students will demonstrate:

understanding of at least one principal form of artistic expression and the creative process inherent therein.

In order to be approved for the Arts category, offerings should engage the creative process directly as well as foster understanding of a principal form of artistic expression. Both performance-oriented and scholarly/historical offerings in the expressive arts are approvable for this category. Literary offerings are also approvable depending on campus-based criteria for distinguishing the Humanities and Arts categories. Courses imparting purely technical skills with no demonstration of aesthetic content are not approvable.

For inter- or multi-disciplinary courses whose scope does not obviously fall within the envelope of traditional principal forms of artistic expression (e.g., courses on technical or practical aspects of design or electronic media) submitted course information should demonstrate clearly:

which principal form(s) of artistic expression students will encounter; the amount of time spent on each form; how students will show understanding of the creative process(es) inherent in the form(s).

9. FOREIGN LANGUAGE

Students will demonstrate:

basic proficiency in the understanding and use of a foreign language; and knowledge of the distinctive features of culture(s) associated with the language they are studying.

The first college semester, or above, of a foreign language constitutes an approvable course in this category. It is acknowledged that campuses have widely differing practices and available resources for the assessment of foreign language preparation. Previously acquired language competence may be determined by a standard measure selected or developed by the relevant faculty and should demonstrate the student's readiness to enter the second college semester of foreign language study. In the case of the Regents Exam, this would mean passing Checkpoint B with a score of 85 or above. Use of the Regents Exam for this purpose is at the discretion of the campus. Many campuses have, and are encouraged to have, language requirements that go beyond the minimum established by the Board resolution.

American Sign Language may be used to satisfy this category only by students in the following programs:

programs leading to certification in elementary and secondary education; programs leading to careers where there is likely to be significant contact with the hearing-impaired.

10. BASIC COMMUNICATION

Students will:

produce coherent texts within common college-level written forms; demonstrate the ability to revise and improve such texts; research a topic, develop an argument, and organize supporting details; develop proficiency in oral discourse; and evaluate an oral presentation according to established criteria.

Approvable courses for this category include

writing-intensive courses that also include significant attention to speaking skills; speaking-intensive courses that also include significant attention to writing skills.

Campuses proposing to cover the Basic Communication outcomes by diffusion (e.g., Writing Across the Curriculum programs) must demonstrate that they are taught and practiced in all the courses involved. This demonstration may be facilitated by describing the mechanisms of course or program organization for achieving the learning outcomes.

Remedial or ESL courses are not acceptable within this category. Nor should students place out of the Basic Communication requirement by high verbal SAT scores, on the grounds that all students need an awareness of and continual practice in all the specifically college-level knowledge and skills.

II. COMPETENCIES

The following two competencies should be infused throughout the General Education program:

1. CRITICAL THINKING (REASONING)

Students will:

identify, analyze, and evaluate arguments as they occur in their own or others' work; and develop well-reasoned arguments.

2. INFORMATION MANAGEMENT

Students will:

perform the basic operations of personal computer use; understand and use basic research techniques; and locate, evaluate and synthesize information from a variety of sources.

The Critical Thinking and Information Management competencies are not necessarily associated with any one course, though either or both of them could be imparted in specific "Critical Thinking" or "Information Management" courses. In either case, campus submissions must demonstrate that the learning outcomes are accomplished in the overall undergraduate curriculum.

Office of the Provost, [SUNY] System Administration, May 4, 2001

F. Model Course Proposal for BSC 100.

Course Proposal

Prefix, Number and Name of Course: BSC 100: Foundations of Inquiry

Credit Hours: 3

In Class Instructional Hours: 3 Labs: 0 Field Work: 0

Catalog Description: Prerequisites: None

Foundations of Inquiry, is designed as an introductory course in critical and creative thinking skills. Students will learn to identify arguments, in the many forms they take, and to analyze and evaluate the strength of those arguments, as well as to better understand their own beliefs and values. Emphasis will be placed on intellectual curiosity, analytical and creative thinking, and fair-mindedness as students apply these skills and attitudes in appropriate ways to topics in the arts, humanities, social sciences and natural sciences

Reasons for Addition:

In 1922, scholar Paul Shorey argued that "the greatest service which . . . college education could render to America today would be . . . to create in every audience a resisting minority that cannot be stampeded by plausible sophistry and emotional volubility." If these words were true in 1922, how much more so must they be today?

Critical thinking courses are prevalent on campuses today for a variety of reasons. they are seen as a pragmatic imperative in an age of information overload, deceptive advertising, and political ideology, as a necessary condition for the very possibility of effective learning in general, and as an approach that fosters an open-minded tolerance of alternative perspectives and worldviews. These goals are consistent with the Buffalo State College mission and the mission of the Intellectual Foundations program. The course will also introduce students to the study of the liberal arts as a foundation for achieving their personal and professional goals.

This course is designed as a first-year experience, to be shared by all students who start college at Buffalo State. The course will frame expectations regarding the Intellectual Foundations program and will provide student with fundamental critical and creative thinking skills to better ensure their active participation in their college education.

Ways in which this course meets the learning outcomes for the NYS Trustees Designation: The proposed course addresses the following learning outcomes identified by the NYS Board of Trustees:

- > Critical Thinking (Reasoning);
- identify, analyze, and evaluate arguments as they occur in their own or others' work
- > develop well-reasoned arguments

Student Learning Outcomes	Content Reference	Assessment
Students will: 1. identify the benefits of a liberal arts & sciences education	I	Class discussion, class participation, and/or written or oral presentation
2. identify critical thinking skills, including creative thinking skills	П	Class discussion, class participation, and/or written examination
3. identify, analyze, and evaluate arguments	III	Class discussion, class participation, and/or written examination
4. apply critical thinking skills to topics/issues related to the arts, humanities, natural sciences, and/or social sciences	IV	Class discussion, class participation, and/or written or oral presentation
5. demonstrate the ability to think critically about one's own values and beliefs.	П	Class discussion, class participation, reflective journal, and/or written or oral presentation
6. demonstrate an understanding of the value of diverse modes of inquiry	I, II, IV	Class discussion, class participation and/or written or oral presentation
7. demonstrate basic ability to use the College computing environment in academic research.	V	Oral and/or written presentation

Course Content

- 1. Conceptual Foundations
 - 1. Overview of the liberal arts & sciences
 - 2. Attributes of a liberally educated individual
 - 3. Value of being a liberally educated individual
- 2. Critical Thinking
 - 1. Value of being a critical thinker
 - 2. Skills necessary to be a critical thinker
 - 3. Critical self-examination
- 3. Identification, Analysis, and Evaluation of Arguments
 - 1. Argument Identification
 - 1. Argument indicators
 - 2. Narratives, opinion pieces, and explanations
 - 2. Argument Analysis
 - 1. Premises and conclusion
 - 2. Logical structure
 - 3. Analogic and creative structure
 - 3. Argument Evaluation
 - 1. Truth of premises
 - 2. Deductive validity
 - 3. Inductive validity
 - 4. Analogic validity
- 4. Application of Critical Thinking Skills to the Arts, Humanities, Natural Sciences and Social Sciences
 - 1. Thinking about Nature
 - 2. Thinking about Society
 - 3. Thinking about Value
 - 4. Thinking about One's Self
- 5. Basic use of College computing environment for academic research