EXCERPT FROM THE MINUTES OF THE IUP UNIVERSITY SENATE, MARCH 22, 2011

5 Liberal Studies Committee and University-Wide Undergraduate Curriculum Committee – Compromise Curriculum Revision

APPROVED

a Liberal Studies Framework:

Liberal Studies Requirements:

All students must fulfill the requirements of the university's Liberal Studies program. This involves a minimum of 43 credits among Learning Skills, Knowledge Areas and Liberal Studies electives. The number of credits may rise slightly depending on student choices. Different colleges and sometimes departments within colleges may have specific variations as to how these Liberal Studies requirements are to be met.

LEARNING SKILLS:	12-13cr
English Composition I and II	6cr
Mathematics	3-4cr
Dimensions of Wellness	3cr

KNOWLEDGE AREAS: 28-29cr

Humanities: One course in history, one in literature and one in 9cr

philosophy or religious studies.

Fine Arts: One Course from List 3cr **Natural Science:** Choose 1 Option 7-8cr

Option I (8 credits): Natural Science Laboratory Courses:
Any two courses with laboratories (4cr each) from the natural

science laboratory course list.

Option II (7 credits): One Laboratory Course plus One Non-

laboratory Course:

One course with a laboratory (4cr) from the natural science

laboratory course list and one course (3cr) from the natural science

non-laboratory course list.

Social Science: Three Courses from List 9cr

LIBERAL STUDIES ELECTIVES

3-9cr

Liberal Studies Electives: syllabi for courses designed to fulfill the Liberal Studies Electives requirement must provide course content that enables students to achieve one or more of the following: global citizenship, information literacy, oral communication, quantitative reasoning, scientific literacy, or technological literacy.

TOTAL 43-51cr

NOTES

1. Global and Multicultural Awareness: One course from List

Students must fulfill this requirement by completing one course from the list; most of these courses will at the same time fulfill other requirements set by Liberal Studies or in some cases by a college or department.

2. Writing Across the Curriculum: Minimum of Two "W" Courses

All students must include among the total courses required for graduation a minimum of two designated writing-intensive courses. One of these courses must be in the student's primary major; the other(s) may be in Liberal Studies, college or major requirements, or free electives. Such courses, which involve extensive use of writing as part of the learning experience, are identified with a "W" as part of the section number in each semester's schedule of classes listing on URSA.

Compromise curriculum framework - side-by-side comparison

Senate Approved Curriculum Framework Spring 2009	Crs	Compromise Curriculum Framework Spring 2011	Crs	Changes from Current Catalog Curriculum	Crs
Learning Skills		Learning Skills			
First Year Seminar	3				
English Composition I and II	6	English Composition I and II	6	English Composition I and II	7
Mathematics	3-4	Mathematics	3-4		
Dimensions of Wellness	3	Dimensions of Wellness	3	Health and Wellness	
Global and Multicultural Awareness	3	Global and Multicultural Awareness*		Non-Western Culture Course	
Oral or Technical Communication	3	11Wal Ciless			
Knowledge Areas		Knowledge Areas			
Humanities: 3 Courses	9	Humanities: 3 Courses	9		
Fine Arts: 1 Course	3	Fine Arts: 1 Course	3		
Natural Science Option I and II	7-8	Natural Science Option I and II	7-8	Natural Science Option I and II	8-10
Social Science: 3 Courses	9	Social Science: 3 Courses	9		
Capstone	0-3				
Across the Curriculum Global Citizenship: 1 Course Informational Literacy: 1 Course Oral Communication: 1 Course		Liberal Studies Electives**	3-9	Liberal Studies Electives	0-9
Quantitative Reasoning: 1 Course Scientific Literacy: 1 Course Written Communication: 2 Courses		Written Communication: 2 Courses***			
				Synthesis – deleted	3
Total	49-54	Total	43-51	Total	48-56

*Global and Multicultural Awareness: One course from List

Students must fulfill this requirement by completing one course from the list; most of these courses will at the same time fulfill other requirements set by Liberal Studies or in some cases by a college or department.

**Liberal Studies Electives - syllabi for courses designed to fulfill the Liberal Studies Electives requirement must provide course content that enables students to achieve one or more of the following: global citizenship, information literacy, oral communication, quantitative reasoning, scientific literacy, or technological literacy.

***Writing Across the Curriculum: Minimum of Two "W" Courses

All students must include among the total courses required for graduation a minimum of two designated writing-intensive courses. One of these courses must be in the student's primary major; the other(s) may be in Liberal studies, college or major requirements, or free electives. Such courses, which involve extensive use of writing as part of the learning experience, are identified with a "W" as part of the section number in each semester's schedule of classes listing on URSA.

Overview and Rationale of the compromise curriculum revision proposal: The following is an overview of the compromise curriculum revision that has been approved by the University Wide Undergraduate Curriculum Committee (UWUCC) and the Liberal Studies Committee (LSC). The request for this revision came from Dr. Werner. The revision changes the Liberal Studies course requirements to 43-51. The reduction of Liberal Studies hours from 48-56 (current) to 43-51 (proposed) comes from the elimination of the synthesis (LBST 499) course (3 credits) and the reduction of English I to three credits and Natural Sciences to 7-8 credits (one credit reduction from each). Rationales for the various changes are briefly outlined below.

Reason for action:

- A Dr. Werner asked to meet with the co-chairs of the UWUCC, Senate chair, Provost, Liberal Studies director, and one member of the LSC to find a way to move forward with the curriculum revision (October 15, 2010).
- B It was agreed by all at the meeting that the best way to move forward was to have the LSC work with the UWUCC to create a compromise proposal.
- C The UWUCC and the LSC are seeking a workable compromise that takes into account budget concerns and the fact that the original revision did not have greater faculty support.

New information to consider since the last revision:

- A Board of Governors changed the minimum number of Liberal Studies (general education) hours needed to graduate from 48 to 40.
- B Budget crises and issues of very limited resources.
- C Middle States Issues of Assessment for example on p. 88 of the 2005 Middle States Report it states "By contrast, a majority of respondents from all three groups uniformly characterized the Liberal Studies goals as a mere catalog of courses rather than a coherent set of objectives that aim at student learning and development. Similarly, the survey respondents were skeptical that the program was coherent."
- D Expected Undergraduate Student Learning Outcomes approved 2 May, 2006 by University Senate. All Liberal Studies courses will have to be updated to meet these outcomes. Ultimately, it will also allow for better assessment of the Liberal Studies Program by aligning the approved Expected Undergraduate Student Learning Outcomes with the criteria to teach the courses.

Why 43-51 credits for Liberal Studies:

- A Many tracks require more than 48 credits of Liberal Studies. In the Undergraduate Catalog there are approximately 42 tracks that require 48 hours of Liberal Studies credits while there are approximately 106 tracks that require more than 48 of Liberal Studies credits.
- B Many accredited programs will benefit by a reduction of total hours.
- C Many programs would not have to do any program revisions.

Specifics of the revised curriculum:

A Health and Wellness vs. Dimensions of Wellness

Dimensions of Wellness provide a broader interpretation of the category. In addition, this type of course allows for more flexibility as to who will offer these courses.

- 1 Updates our curriculum to reflect a more modern definition of wellness.
- 2 Provides more wellness options to help students deal with their first year of college.

B Non-western vs. Global and Multicultural Awareness

Change title of the Non-Western Cultures category to Global and Multicultural Awareness.

- 1 Provides for a broader range of courses to meet this requirement.
- Addresses specific issues raised by Middle States about the lack of global citizenship in our current curriculum.
 - a Specifically, on p. 89 of the Middle States Report of 2005 it states: "Further evidence of the extent to which values, ethics, diverse perspectives, and global citizenship are incorporated in Liberal Studies courses is offered by a review of sample syllabi (n=25), which revealed that 96 percent of Liberal Studies courses address values, 70 percent address ethics, and 92 percent include diverse perspectives, while only 52 percent address global citizenship (Appendix 12.16)."
 - b In addition, on p. 5 of the Strategic Plan AY 2010-2014 it states that one part of the plan "Reflects a commitment to international and global awareness."
 - c Data from the last three years of assessment of the Liberal Studies Program indicate that the weakest area of the Expected Undergraduate Student Leaning Outcomes is the Respect for Identities, Histories, and Cultures of Others. This will help to strengthen this area.
- 3 Helps to gives Liberal Studies courses in general a purpose rather than being a "mere catalog of courses" (p. 88 of Middle States Report 2005).
- 4 The current non-western courses would fulfill this category initially so there is no immediate need for new courses.

C Liberal Studies Electives and Across the Curriculum Courses (categories)

Integrate Across-the-Curriculum categories (except for Writing) into the Liberal Studies Electives category.

- 1 Liberal Studies Electives must address at least one of the following areas: global citizenship, information literacy, oral communication, quantitative reasoning, scientific literacy or technological literacy.
- Addresses specific issues raised by Middle States, e.g. this category would now have a specific purpose or goal.

D Writing intensive courses

Why leave the category as it is in our current curriculum?

- 1 Middle States Assessment requires assessment of the Liberal Studies Program. We have been using senior level writing course assignments to do this the past two years. The assessment of those areas (application and/or synthesis, critical thinking, and communication) indicates that we are doing a good job.
- 2 The writing intensive courses with at least one in the major appear to be supplying our students with the tools necessary to be at comparable levels to other target universities in this category.

E Eliminate Synthesis, First Year Seminar, Oral and Technical Communication Requirement

- 1 Why eliminate synthesis?
 - Budget issues –saves faculty resources for other areas of the curriculum.
- Why eliminate First Year Seminar and Oral and Technical Communication?

 Budget issues no new courses added to the compromise curriculum, especially ones with smaller class sizes.

b Liberal Studies Criteria

Introduction to Liberal Studies

The contents of this Liberal Studies Curriculum Handbook are intended to serve as a guide for faculty and departments in their efforts to develop courses for the Liberal Studies curriculum. It is necessary for this program to meet the goals of the University and to provide a comprehensive curriculum that will provide all IUP students the opportunity to meet the Expected Undergraduate Student Learning Outcomes. This is the objective of the Liberal Studies program as a whole but not the responsibility of individual courses. No one course or program is expected to meet all of the Student Learning Outcomes.

When developing curriculum proposals, individual faculty and departments should review the Expected Undergraduate Student Learning Outcomes and define them as appropriate to their courses and departmental goals. Specific terms included in the outcomes should be defined as appropriate to the course content or disciplinary area. This is particularly important in cases where multiple sections of a course are offered and being taught by different faculty members. These instructors will need to agree on how these student learning outcomes are defined within their courses.

Proposals will need to include a justification for the exclusion of an Expected Undergraduate Student Learning Outcome (in whole or in part) that has been designated as "required" in a particular course or curricular category.

I. Guidelines for Liberal Studies Course Proposals

A. Course Proposal Content Guidelines

Wherever appropriate to the course content, courses in the Liberal Studies curriculum should:

- provide course content that addresses issues of diversity, including the contributions of ethnic and racial minorities and of women
- address critical-thinking and scholarly discourse
- require the reading and use by students of at least one non-textbook work of fiction or non-fiction or a collection of related articles

Additionally, all courses in the Liberal Studies Curriculum must:

- be distinguished from technical courses designed primarily for majors
- be distinguished from professional or pre-professional courses
- be distinguished from courses that are designed primarily for the needs of beginning majors and which presume the taking of additional course work in that discipline
- be distinguished from remedial courses
- address (for multiple sections of the same course) how a basic equivalency will be achieved to enable all sections to meet common student learning outcomes and course content

B. Faculty and Department Commitment to Liberal Studies

Individual faculty and academic departments offering courses in IUP's Liberal Studies program must commit to the following:

- sustaining the course content set out in the original course proposal in such a way that the course will continue to meet the course outcomes outlined in the approved course syllabus and the primary Expected Student Learning Outcomes set forth in the course criteria
- participating in the Liberal Studies Committee's periodic review of Liberal Studies courses
- addressing the teaching of Liberal Studies courses in departmental five-year reviews

II. Liberal Studies Proposal Submission Guidelines

All curriculum proposals for Liberal Studies follow the procedures outlined in the University-Wide Undergraduate Curriculum Committee (UWUCC) curriculum handbook. New and revised Liberal Studies courses and revisions to the Liberal Studies portion of any program also come to the Liberal Studies Committee for review, are forwarded for action to the UWUCC and University Senate.

New and Revised Course Proposals submit:

- One copy of the course syllabus (in UWUCC Syllabus of Record Format), with signed cover sheet attached to the Liberal Studies Office
- One copy of the Expected Undergraduate Student Learning Outcomes Chart identifying the primary outcomes for the course as outlined in the course or category criteria
- Assignment instructions for one of the major course assignments and a grading rubric or grading criteria for that assignment

Individuals proposing courses that fulfill only part of a credit requirement for a given course or category must address how students will be able to meet the remainder of the requirement. For example if a one-credit course is designed to fulfill one-third of a three-credit Liberal Studies requirement proposers will need to address the availability of other one- or two-credit courses to fulfill the remainder of the requirement

Program Proposals

- Proposals for new programs or revisions to the Liberal Studies portion of an
 existing program will submit one copy of the proposal, following the UWUCC
 guidelines, with signed cover sheet attached, to the Liberal Studies Office.
- Syllabi for new or revised courses that are part of the program revision must also be included.

Dimensions of Wellness

Students are required to complete three (3) credits in the Dimensions of Wellness category. The primary focus of this course requirement is upon one of the following dimensions of wellness: emotional, financial, intellectual, occupational, physical, social or spiritual. Because wellness is a multi-dimensional concept, each course must clearly demonstrate how the dimension of primary focus relates to at least one of the other dimensions. All Dimensions of Wellness courses must require students to participate in active learning or experiential activities designed to enhance personal well-being.

Dimensions of Wellness Expected Undergraduate Student Learning Outcomes

Syllabi for courses designed to fulfill the Liberal Studies Dimensions of Wellness

requirement must provide course content that enables students to achieve the Expected Undergraduate Student Learning Outcomes identified below. Course proposals may identify additional objectives from the list of Expected Undergraduate Student Learning Outcomes as appropriate to the course content.

As Informed Learners students will demonstrate knowledge and understanding of:

• the interrelationships within and across disciplines

As Empowered Learners students will demonstrate:

- information literacy skills including the ability to access, evaluate, interpret and use information from a variety of sources
- the ability to transform information into knowledge and knowledge into judgment and action
- critical thinking skills including analysis, application and evaluation
- reflective thinking and the ability to synthesize information and ideas

As Responsible Learners students will demonstrate:

• an understanding of the ethical and behavioral consequences of decisions and actions on themselves, on society and on the physical world

Dimensions of Wellness Required Course Content

Proposals for courses designed to fulfill the Liberal Studies Dimensions of Wellness requirement must include:

- clearly identified active learning or experiential activities that require students to apply course content
- self-reflective activities that provide insight into personal wellness
- an assessment of personal strengths and challenges within the dimension of primary focus
- development of an improvement plan to address the challenges identified in the assessment exercises
- a culminating self-evaluation of the student's progress toward improvement
- use of the Internet as a means to gather accurate information relevant to the topic of primary focus; it is expected that the Internet will be where students and their families will seek wellness information

Individuals proposing courses designed to fulfill the Liberal Studies Dimension of Wellness requirement are encouraged to include:

- activities that promote development of oral and/or written communication
- activities that encourage service learning opportunities
- approximately 30 percent of the class time devoted to active learning or experiential activities

Dimensions of Wellness Common Learning Objectives

All courses meeting the Liberal Studies Dimensions of Wellness requirement will establish common course objectives stating:

At the conclusion of the course the student should be able to:

- describe the factors within the course's primary focus that influence wellness
- understand how to apply the skills learned in this course throughout his or her life
- use information literacy skills to seek and evaluate wellness-related information
- identify the benefits of a wellness-oriented lifestyle and consequences of a wellness-neglected lifestyle

Literature

Students are required to complete three (3) credits from an approved menu of literature course options. The National Council of Teachers of English (NCTE, 1999) and the Association of Departments of English (ADE, 2009) recommend enrollment limits of 35 students to allow an appropriate level of group-work and class interaction.

Literature Expected Undergraduate Student Learning Outcomes

Syllabi for courses designed to fulfill the Liberal Studies Literature requirement must provide course content that enables students to achieve the Expected Undergraduate Student Learning Outcomes identified below. Course proposals may identify additional objectives from the list of Expected Undergraduate Student Learning Outcomes as appropriate to the course content.

As Informed Learners students will demonstrate knowledge and understanding of:

- the aesthetic facets of human experience
- the human imagination, expression and traditions of many cultures

As Empowered Learners students will demonstrate:

- critical thinking skills including analysis, application and evaluation
- reflective thinking and the ability to synthesize information and ideas
- ease with textual, visual and/or electronically-mediated literacies

As Responsible Learners students will demonstrate:

 an understanding of themselves and a respect for the identities, histories, and cultures of others

Literature Required Course Content

Proposals for courses designed to fulfill the Liberal Studies Literature requirement must include:

- works of imaginative literature, both poetry and fiction (whether novel, short story, or dramatic text); works that introduce students to a mixture of literary genres and are not limited to a single genre or form
- works by ethnic and racial minorities and women
- techniques that foster students' ability to sustain engagement with a variety of

literary works

• techniques that foster students' ability to analyze and interpret literature independently and collaboratively

Individuals or departments proposing courses designed to fulfill any Liberal Studies Literature course are encouraged to include content from both English-language literatures and as relevant, literatures in translation and content that will:

- focus on literatures from around the world
- focus on a particular theme
- include works of creative non-fiction
- include a mix of historical periods and historical cultures

<u>Literature Common Learning Objectives</u>

All courses meeting the Liberal Studies literature requirement will establish the following common learning objectives:

At the conclusion of the course the student should be able to:

Understand aesthetic and imaginative facets of human experience by being able to:

- discuss the purposes and functions of literature within society
- recognize the power of finely controlled language beyond its informational dimension, such as its auditory, imagistic, affective, symbolic, and hermeneutic possibilities
- appreciate the ways in which one text can form the basis for multiple, sometimes competing, interpretations

Demonstrate critical and reflective thinking skills by being able to:

- articulate and effectively communicate how a text has become meaningful
- formulate questions appropriate to the understanding of literary texts
- develop interpretations of literary texts that are grounded in careful reading strategies and in any of many literary or theoretical approaches
- understand literature as a reflection of or challenge to the culture and time in which it was produced

Association of Departments of English. (Winter-Spring 2009). "ADE Guidelines for Class Size and Workload for College and University Teachers of English," Retrieved November 9, 2009 from www.ade.org/bulletin/frames_browse.htm

National Council of Teachers of English. (1999). "NCTE Position on Class Size and Teacher Workload, Kindergarten to College." Retrieved November 9, 2009 from: http://www.ncte.org/about/policy/guidelines/107620.htm

Global and Multicultural Awareness

Global and Multicultural Awareness courses are designed to provide students with the opportunity to learn more about the world and its diverse peoples and to promote a better

understanding of other cultures. Students should gain an understanding of global events and how these events affect their lives as well as creating possibilities to address them.

A Global and Multicultural Awareness course may present one or more cultures by emphasizing a single dimension, e.g. art, music, dance, politics, religion. Such a course is appropriate if the dimension is represented in its cultural context. Although a Global and Multicultural Awareness course may deal with a single culture, comparative courses addressing relationships among cultures are encouraged.

Students must fulfill this requirement by completing one course from the list of approved courses; most of these courses will at the same time fulfill other requirements set by Liberal Studies or in some cases by a college or department.

Global and Multicultural Awareness Expected Undergraduate Student Learning Outcomes

Syllabi for courses designed to fulfill the Liberal Studies Global and Multicultural Awareness requirement must provide course content that enables students to achieve the Expected Undergraduate Student Learning Outcomes identified below. Course proposals may identify additional objectives from the list of Expected Undergraduate Student Learning Outcomes as appropriate to the course content.

As Informed Learners students will demonstrate knowledge and understanding of:

- the interrelationships within and across cultures and global communities
- As Empowered Learners students will demonstrate:
 - critical thinking skills including analysis, application and evaluation
 - reflective thinking and the ability to synthesize information and ideas

As Responsible Learners students will demonstrate

• an understanding of themselves and a respect for the identities, histories, and cultures of others

Global and Multicultural Awareness Required Course Content

Proposals for courses designed to fulfill the Liberal Studies Global and Multicultural Awareness requirement must include:

- the interrelationships within and across cultures and global communities
- development of students' understanding of cultures that differ from the prevailing cultures of the United States, Canada, Western Europe, New Zealand, and Australia. However, courses on minority cultures from within these countries, e.g., aboriginal Australians, Native Americans in Canada or the United States, or North Africans in Western Europe, may be seen as global.
- presentation of cultures on their own terms with an appreciation of their dimensions, going beyond mere description of a culture; those dimensions may include religion, economics, politics, art, language, literature, ethics, as well as other dimensions of the cultural milieu

Liberal Studies Electives

<u>Liberal Studies Electives Expected Undergraduate Student Learning Outcomes</u>

Syllabi for courses designed to fulfill the Liberal Studies Electives requirement must provide course content that enables students to achieve one or more of the following: global citizenship, information literacy, oral communication, quantitative reasoning, scientific literacy, or technological literacy.

Global Citizenship

Liberal Studies Elective courses designed to address global citizenship take students beyond the concept of cultural appreciation and are designed to help students see themselves as citizens of the world and to develop among them an awareness of the problems of social justice and equity. Syllabi for courses must provide course content that enables students to achieve the Expected Undergraduate Student Learning Outcomes identified below. Course proposals may identify additional objectives from the list of Expected Undergraduate Student Learning Outcomes as appropriate to the course content.

As Informed Learners students will demonstrate knowledge and understanding of:

- the interrelationships within and across cultures and global communities
- As Empowered Learners students will demonstrate:
 - information literacy skills including the ability to access, evaluate, interpret and use information from a variety of sources
 - critical thinking skills including analysis, application and evaluation
 - reflective thinking and the ability to synthesize information and ideas

As Responsible Learners students will demonstrate:

- intellectual honesty
- concern for social justice
- civic engagement
- an understanding of the ethical and behavioral consequences of decisions and actions on themselves, on society and on the physical world
- an understanding of themselves and a respect for the identities, histories, and cultures of others

Proposals for courses designed to address global citizenship must include:

- an emphasis on understanding global communities, including the relationships within and between cultures
- an examination of global issues (such as diversity in gender, religion, politics, ethnicity, economics or the arts; environmental sustainability, social responsibility in global business or inequities in education or global literacy)
- content that increases students' awareness of the problems of social justice and equity
- at least 50% of the course grade based on assignments related to Global Citizenship

Proposals for courses designed to address global citizenship are encouraged to include:

- an examination of the ways differing cultures establish and rely on systems of values, norms and ideals
- content that enables students to gain knowledge of the past and present and interrelations among communities from historical, philosophical, scientific or social perspectives
- content that examines problems of environmental sustainability (or lack thereof) and how those problems relate to social issues
- an exploration of the ethical and behavioral consequences of decisions and actions on individuals, society and the physical world

Information Literacy

Liberal Studies elective courses designed to address information literacy must provide course content that enables students to achieve the Expected Undergraduate Student Learning Outcomes identified below. Course proposals may identify additional objectives from the list of Expected Undergraduate Student Learning Outcomes as appropriate to the course content.

As Empowered Learners students will demonstrate:

- effective oral and written communication abilities
- ease with textual, visual and electronically-mediated literacies
- information literacy skills including the ability to access, evaluate, interpret and use information from a variety of sources
- critical thinking skills including analysis, application and evaluation

As Responsible Learners students will demonstrate:

• intellectual honesty

Proposals for courses designed to address information literacy must include: standards

- course pedagogy and assignments that address a minimum of three of the five from the IUP Information Literacy Competency Standards (see Appendix I)
- assignments that require students to use a variety of print and non-print resources (including, but not limited to, books, newspaper articles, journal articles, on-line periodical databases, government documents, web pages, etc.)
- course content that addresses the legal and ethical use of information

Oral Communication

Liberal Studies elective courses designed to address oral communication must provide course content that enables students to achieve the Expected Undergraduate Student Learning Outcomes identified below. Course proposals may identify additional objectives from the list of Expected Undergraduate Student Learning Outcomes as appropriate to the course content.

As *Empowered Learners* students will demonstrate:

- effective oral and written communication abilities
- information literacy skills including the ability to access, evaluate, interpret, and use information from a variety of sources
- reflective thinking and the ability to synthesize information and ideas

Proposals for courses designed to address oral communication must include:

- oral communication activities that are integrated into the course content
- guidance for students on researching and organizing the content of oral communication activities

Quantitative Reasoning

Liberal Studies elective courses designed to address quantitative reasoning must provide course content that enables students to achieve the Expected Undergraduate Student Learning Outcomes identified below. Course proposals may identify additional objectives from the list of Expected Undergraduate Student Learning Outcomes as appropriate to the course content.

As Informed Learners students will demonstrate knowledge and understanding of:

• the ways of modeling the natural, social and technical worlds

As Empowered Learners students will demonstrate:

- problem solving skills using a variety of methods and tools
- critical thinking skills including analysis, application and evaluation

Proposals for courses designed to address quantitative reasoning must:

- engage students in the interpretation, analysis and use of numerical and graphical data
- apply quantitative techniques to address problems within a specific discipline
- develop logical and deductive reasoning

Scientific Literacy

Liberal Studies elective courses designed to address scientific literacy must provide course content that enables students to achieve the Expected Undergraduate Student Learning Outcomes identified below. Course proposals may identify additional objectives from the list of Expected Undergraduate Student Learning Outcomes as appropriate to the course content.

As Informed Learners students will demonstrate knowledge and understanding of:

• the interrelationships within and across disciplines

As Empowered Learners students will demonstrate:

- problem solving skills using a variety of methods and tools
- information literacy skills including the ability to access, evaluate, interpret and use information from a variety of sources
- critical thinking skills including analysis, application and evaluation

As Responsible Learners

• an understanding of the ethical and behavioral consequences of decisions and actions on themselves, on society and on the physical world

Proposals for courses designed to address scientific literacy must:

- investigate relevance, application, and impact of science to student's life or field of study
- apply problem solving and critical thinking skills
- transform information to explore hypotheses and draw conclusions

Technological Literacy

Liberal Studies elective courses designed to address technical literacy must provide course content that enables students to achieve the Expected Undergraduate Student Learning Outcomes identified below. Course proposals may identify additional objectives from the list of Expected Undergraduate Student Learning Outcomes as appropriate to the course content.

As Empowered Learners students will demonstrate:

- ease with textual, visual and electronically-mediated literacies
- problem solving skills using a variety of methods and tools
- information literacy skills including the ability to access, evaluate, interpret and use information from a variety of sources
- critical thinking skills including analysis, application and evaluation

As Responsible Learners students will demonstrate:

- intellectual honesty
- an understanding of the ethical and behavioral consequences of decisions and actions on themselves, on society and on the physical world

Proposals for courses designed to address technical literacy must include content and instruction:

- related to the use of productivity software*, **statistical software** or technological devic that provides opportunities for students to achieve the required student learning outco
- that provides opportunities for students to understand how information technology in ethical and behavioral consequences of decisions and actions

Writing Across-the-Curriculum

The Writing Across-the-Curriculum requirement can be accomplished in any part of a

^{*} Productivity software could include word processing, database management, spreadsheets, presentation software, web-based technologies and other applications packages.

student's curriculum including major courses, electives and other Liberal Studies courses with the exception of the English Composition I and II courses taken to fulfill the Liberal Studies Learning Skills requirements. The National Council of Teachers of English recommends class sizes of no more than 20 for composition courses (NCTE, 1999). It is recommended that Writing Across-the-Curriculum courses enroll no more than 25 students per section.

Writing Across-the-Curriculum Expected Undergraduate Student Learning Outcomes

Syllabi for courses designed to fulfill the Written Communication Competency-Across-the-Curriculum requirement must provide course content that enables students to achieve the Expected Undergraduate Student Learning Outcomes identified below. Course proposals may identify additional objectives from the list of Expected Undergraduate Student Learning Outcomes as appropriate to the course content.

As Empowered Learners students will demonstrate:

- effective oral and written communication abilities
- information literacy skills including the ability to access, evaluate, interpret and use information from a variety of sources
- critical thinking skills including analysis, application and evaluation
- reflective thinking and the ability to synthesize information and ideas

As Responsible Learners students will demonstrate:

• intellectual honesty

Writing Across-the-Curriculum Required Course Content

Proposals for courses designed to fulfill the Liberal Studies Written Communication Competency-Across-the-Curriculum requirement must include:

- writing assignments designed to enhance students' ability to write
- guidance to students in conceptualizing, organizing, and presenting written material giving attention to both the process and product of writing
- writing assignments that have clearly defined stages of preparation and regular progress reviews (including feedback from the instructor and opportunities for revision)
- at least one assignment that requires students to produce a finished, edited document
- written assignments throughout the semester that amount to a minimum of 15-20 typed pages or approximately 5,000 words
- at least 50% of the course grade based on writing assignments

Writing Across-the-Curriculum Common Learning Objectives

All courses meeting this competency will establish the following common learning objectives:

At the conclusion of the course the student should be able to:

- effectively communicate in writing
- respond critically and analytically to materials and sources relevant to the course
- discuss/critique his or her own writing