

F. Oral or Technical Communication

Students are required to complete three credits in either oral or technical communication. This requirement may be fulfilled by completing the approved Oral Communication course or one of the approved Technical Communication courses.

In addition to the required Oral or Technical Communication course, students must complete one additional Oral Communication Competency-Across-the-Curriculum (CAC) course and one additional Information Literacy Across-the-Curriculum course.

The Oral Communication CAC course may be accomplished in any part of a student's curriculum including other Liberal Studies courses, major courses or electives. As well, the Information Literacy CAC course may be accomplished in any part of a student's curriculum including other Liberal Studies courses, major courses or electives.

1. Oral Communication

Oral Communication Expected Undergraduate Student Learning Outcomes

Syllabi for courses meeting the Liberal Studies Oral Communication requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

As *Empowered Learners* students will demonstrate:

- effective oral and written communication abilities
- critical thinking skills including analysis, application and evaluation

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies Oral Communication requirement:

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:

- 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
- the ability to transform information into knowledge and knowledge into judgment and action
- the ability to work within complex systems and with diverse groups
- reflective thinking and the ability to synthesize information and ideas

As *Responsible Learners* students will demonstrate:

- intellectual honesty

Oral Communication Required Course Content

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

- Oral communication theory and practice of oral communication skills as the primary focus of the course
- Oral communication activities that are integrated into the course and not “add-ons” at the end of the semester
- The application of principles of speech which promote accuracy, logic and clarity
- The organization, construction and delivery by the student of at least three presentations
- Opportunities for feedback from the instructor after each oral communication activity and prior to the next one
- An opportunity for a written self-analysis or reflection paper by the student after at least one oral communication activity
- Student demonstrations of knowledge about verbal and nonverbal communication in various contexts – e.g. interpersonal, small group and public speaking
- At least 75% of the total course grade based on oral communication activities.
- Critique of the oral communication activities by the student presenter or other students, appraising the accuracy of the information and the effectiveness of the delivery
- Demonstration of ability to appropriately analyze audience, context, and speech content
- Demonstration of the awareness of the role that physical behavior such as posture, gestures, stance, body movements and facial expression play in communication

Oral Communication Common Learning Objectives

All courses meeting the Liberal Studies Oral Communication requirement will establish common course objectives stating:

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

- demonstrate knowledge about the principles of communication theory
- demonstrate verbal and nonverbal communication skills in various contexts - e.g. interpersonal, small group, public speaking)
- before a communication activity, analyze the audience and speaking context and adapt as appropriate; during a speech recognize listeners' needs, analyze their responses and adapt communication accordingly
- apply principles of speech which promote accuracy, logic and clarity
- organize, construct and deliver oral presentations
- effectively use visual(s) to enhance oral presentation(s)
- critique the oral communications self and of others, appraising accuracy of the information and effectiveness of the delivery

2. Technical Communication

The technical communication course is intended to develop technological communication skills and should provide students a basic understanding of how a computer or other technological device is used as a communication tool. The course will include teaching of computer skills and other technology for the purpose of communication, organization, research and problem solving.

Technical Communication Expected Undergraduate Student Learning Outcomes

Syllabi for courses meeting the Liberal Studies Technical Communication requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

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

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies Technical Communication requirement:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the past and present from historical, philosophical and social perspectives
- the human imagination, expression and traditions of many cultures
- the interrelationships within and across cultures and global communities
- the interrelationships within and across disciplines

Technical Communication Required Course Content

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

- The use of productivity software* to demonstrate ease with textual, visual and electronically-mediate literacies.
- The use of productivity software* to demonstrate problem solving skills using a variety of methods and tools.
- The use of productivity software* to demonstrate information literacy skills including the ability to access, evaluate, interpret and use information from a variety of sources.

- The use of productivity software* to demonstrate critical thinking skills including analysis, application and evaluation.
- Opportunities for students to demonstrate an understanding of the ethical and behavioral consequences of decisions and actions related to information technology on themselves, on society and on the physical world.

*Productivity software could include the following concepts:

- Word Processing
- Database Management
- Spreadsheets
- Presentation software
- Web based technologies
- Other application packages

Additionally, individuals proposing courses designed to fulfill the Liberal Studies Technical Communication requirement are encouraged to include:

Demonstrating knowledge and understanding of computer as it relates to:

- The past and present from historical, philosophical and social perspectives
- The human imagination, expression and traditions of many cultures
- The interrelationships within and across cultures and global communities
- The interrelationships within and across disciplines

Technical Communication Common Learning Objectives

All courses meeting the Liberal Studies Technical Communication requirement will establish common course objectives stating:

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

- Identify the various laws and regulations dealing with the protection of original properties
- Discuss the implication of freedom of access to information as it pertains to individual rights to privacy.
- Create multimedia presentations dealing with the effects of technology on society.
- Demonstrate effective techniques for searching electronic resources
- Develop a basic webpage that demonstrates communication and organization skills
- Demonstrate proficiency in productivity software for the purpose of communications, organization, research and problem solving.

IV. Liberal Studies Knowledge Area Requirements

A. Fine Arts

Students must complete one (1) three-credit course in the Fine Arts category.

Fine Arts Expected Undergraduate Student Learning Outcomes

Syllabi for courses meeting the Liberal Studies Fine Arts requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the ways of modeling the natural, social and technical worlds
- the aesthetic facets of human experience
- the human imagination, expression and traditions of many cultures

As *Empowered Learners* students will demonstrate:

- problem solving skills using a variety of methods and tools
- the ability to transform information into knowledge and knowledge into judgment and action
- critical thinking skills including analysis, application and evaluation

As *Responsible Learners* students will demonstrate:

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

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies Fine Arts requirement:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the past and present from historical, philosophical and social perspectives
- the interrelationships within and across cultures and global communities
- the interrelationships within and across disciplines

As *Empowered Learners* students will demonstrate:

- effective oral and written communication abilities
- reflective thinking and the ability to synthesize information and ideas

Fine Arts Required Course Content

Courses designed to fulfill the Liberal Studies Fine Arts requirement must enable students to develop an understanding of the nature of artistic inquiry and to develop a critical and aesthetic appreciation of artworks. Proposals for courses designed to fulfill the Liberal Studies Fine Arts requirement must include:

- Foundational information on the process of creating one or more art forms through artworks that emphasize symbolic, affective, and imaginative ways of knowing – traditionally the visual and performing arts
- Readings in the artistic discipline(s) of study

- An examination of artistic inquiry from a particular culture and tradition compared and contrasted to another culture and tradition
- An exploration of the human creative process unique to artistic creation, compared and contrasted to other creative processes (e.g. scientific, mathematic, or linguistic)
- An experience of finding, accessing, attending, and responding to at least two arts events
- Foundational information on methods of critical analysis of artwork as distinctly different from other modes of human creativity
- Critical responses to artworks across perspectives such as time, geography, and gender

Additionally, individuals proposing courses designed to fulfill the Liberal Studies Fine Arts requirement are encouraged to include:

- A historical and chronological context for the creation of a particular form of art
- Foundational information connecting classical art forms and ideas to the art of today
- Collaborative experiences in a creative process of artistic inquiry
- Writing or other forms of articulation for discourse within and among the artistic disciplines
- Writing or other forms of articulation for discourse linking ideas of artistic creation to the larger topic of human experience
- Instruction in methods of artistic creation
- Direct engagement with artistic media and materials to create a work of art for public response

Fine Arts Common Learning Objectives

All courses meeting this requirement will establish course objectives stating:

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

- demonstrate understanding of the process(es) by which art forms are created – traditionally the visual and performing arts – and be able to compare with other modes of thinking (e.g. scientific, mathematic, linguistic)
- examine artistic inquiry amongst representative cultures and traditions and be able to differentiate and recognize similarities among them and across perspectives such as time, geography, and gender
- experience and develop the tools necessary to find, access, attend and critically respond to at least two arts events
- demonstrate understanding of selected readings from the artistic discipline(s)

B. Humanities

To fulfill the Humanities requirement, students will complete one (1) three-credit course in each of three areas: History, Literature and Philosophy or Religious Studies.

1. History

All students are required to take one (1) history course from a menu of approved history courses.

History Expected Undergraduate Student Learning Outcomes

Syllabi for courses meeting the Liberal Studies History requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the past and present from historical, philosophical and social perspectives
- the interrelationships within and across cultures and global communities

As *Empowered Learners* students will demonstrate:

- 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
- 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:

- intellectual honesty
- concern for social justice
- 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

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies History requirement:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the ways of modeling the natural, social and technical worlds
- the aesthetic facets of human experience
- the human imagination, expression and traditions of many cultures
- the interrelationships within and across disciplines

As *Empowered Learners* students will demonstrate:

- effective oral and written communication abilities
- problem solving skills using a variety of methods and tools
- the ability to work within complex systems and with diverse groups

As *Responsible Learners* students will demonstrate:

- civic engagement

History Required Course Content

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

- Place historical themes/eras within the larger context of civilization and its development, covering at least a period of one hundred years.
- Treat several different aspects of history and their inter-relationships, e.g. political history, economic history, cultural history.
- Integrate mainstream historical trajectories with aspects of race, ethnicity, class, and gender.
- Treat concepts, themes and events in sufficient depth to enable students to appreciate the complexity of what is being studied; and not be merely cursory coverage of lists of topics.
- Suggest the major intellectual questions/problems which interest practitioners of the discipline and explore critically the important theories and principles presented by the discipline.
- Allow students to understand and apply the methods of inquiry and vocabulary commonly used in the discipline.
- Make students aware of various and sometimes contradictory historical interpretations.
- Communicate the importance of primary sources which express the thinking of men and women of different ages.

Additionally, individuals proposing courses designed to fulfill the Liberal Studies History requirement are encouraged to include content that will:

- Develop students' historical consciousness, that is, an understanding of the interrelationship of various aspects of culture at a given time and an ability to explore continuity and change among historical events and movements.
- Enable students to perceive contemporary experiences in historical perspective.

2. Literature

Students are required to complete one (1) three-credit course from an approved menu of literature course options.

Literature Expected Undergraduate Student Learning Outcomes

Syllabi for courses meeting the Liberal Studies Literature requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

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

As *Responsible Learners* students will demonstrate:

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

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies Literature requirement:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the ways of modeling the natural, social and technical worlds
- the past and present from historical, philosophical and social perspectives
- the interrelationships within and across cultures and global communities

As *Empowered Learners* students will demonstrate:

- effective oral and written communication abilities
- ease with textual, visual and electronically-mediated literacies
- problem solving skills using a variety of methods and tools

As *Responsible Learners* students will demonstrate:

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

Literature Required Course Content

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

- works of imaginative literature, including poetry and fiction (whether novel, short story, or dramatic text)
- works by ethnic and racial minorities and women
- techniques that will foster students' ability to sustain engagement with a variety of literary works

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

Additionally, individuals proposing courses designed to fulfill the Liberal Studies Literature requirement are encouraged to include content that will:

- a focus on a particular theme
- a focus on western or global literatures, or a mix of both
- works of creative non-fiction (technically defined)¹
- a mix of historical periods and cultures

Literature Common Learning Objectives

All courses meeting the Liberal Studies Literature requirement will establish course objectives stating:

At the conclusion of the course the student will 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

Additional Recommendations:

For this multi-section course, it is recommended that the department collect and rate a valid random sample of assigned student writing. The assignment should demonstrate interpretive skill and aesthetic awareness, including the ability to define, explain, and apply literary terms or concepts through the use of textual examples.

To allow an appropriate level of group-work and class interaction, enrollment should be limited to 35 students.

¹ "Creative nonfiction" (also called "literary nonfiction" or "literary journalism") refers to an emergent but influential genre of literature. Unlike most nonfiction writing, which informs anonymously, works of creative nonfiction exhibit strong imagination, voice, and literary craft as well as documentable factuality.

Liberal Studies Criteria **3/18/2009**

3. Philosophy or Religious Studies

Students are required to complete one (1) Philosophy or Religious Studies course from the approved menu of courses.

Courses in this category must acquaint students with primary sources as appropriate and encourage the development of independent judgment and critical thinking. These courses must also acquaint students with the European/Euro-American Intellectual Heritage. Courses must have PHIL or RLST Prefix.

Courses in philosophy and religious studies should provide content that treats concepts, themes and events in sufficient depth to enable students to appreciate the complexity, history and current implications of what is being studied. These courses should also suggest the major intellectual questions/problems which interest practitioners of a discipline and explore critically the important theories and principles presented by the discipline. Students should be provided opportunities to understand and apply the methods of inquiry and vocabulary commonly used in the discipline and encouraged to use and enhance, wherever possible, the composition and mathematics skills built in the Learning Skill of Liberal Studies.

a. Philosophy

Philosophy Expected Undergraduate Student Learning Outcomes

Syllabi for courses meeting the Liberal Studies Philosophy requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the past and present from historical, philosophical and social perspectives
- the interrelationships within and across disciplines

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
- 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:

- intellectual honesty
- concern for social justice
- 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

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies Philosophy requirement:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the ways of modeling the natural, social and technical worlds
- the aesthetic facets of human experience
- the human imagination, expression and traditions of many cultures
- the interrelationships within and across cultures and global communities

As *Empowered Learners* students will demonstrate:

- problem solving skills using a variety of methods and tools
- the ability to work within complex systems and with diverse groups

As *Responsible Learners* students will demonstrate:

- civic engagement

Philosophy Required Course Content

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

- Introduce students to some of the great philosophers of Western civilization, avoiding excessive emphasis on one author or period of philosophical development.
- Introduce students to some or all of the major areas of philosophy (aesthetics, epistemology, ethics, logic, and metaphysics).
- Courses which choose to emphasize one or more of these areas must do so in such a way as to show students the relationship among the various areas of philosophy.
- Alternately, courses which choose to approach these areas of philosophy historically by examining one or more of the recognized historical periods in philosophy (e.g. ancient/medieval, modern or contemporary) must do so in such a way as to show students the contrasts and similarities with other periods.
- Provide opportunities through the close analysis and evaluation of fundamental issues, for students to gain both an understanding of philosophy and an enhanced ability to think critically and responsibly about important issues.
- Investigate relationships with non-Western traditions and cultures where appropriate.
- Give due attention to the philosophical work of women and minorities.
- Use primary sources when feasible and appropriate.

Philosophy Common Learning Objectives

All courses meeting the Philosophy requirement will establish course objectives stating:

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

- comprehend and express the significance of a wide variety of experiences, situations, data, events, judgments, conventions, beliefs, rules, procedures and criteria;
- identify the intended and actual inferential relationships among statements;

- assess the credibility of statements and assessing the logical strength of the actual or intended inferential relationships among statements;
- identify elements needed to draw reasonable conclusions and deducing the consequences that flow from premises; and,
- present reasoning in the form of cogent arguments.

b. Religious Studies

Religious Studies Expected Undergraduate Student Learning Outcomes

Syllabi for courses meeting the Liberal Studies Religious Studies requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the past and present from historical, philosophical and social perspectives
- the human imagination, expression and traditions of many cultures
- the interrelationships within and across cultures and global communities

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
- the ability to transform information into knowledge and knowledge into judgment and action
- the ability to work within complex systems and with diverse groups
- 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
- 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

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies Religious Studies requirement:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the ways of modeling the natural, social and technical worlds
- the aesthetic facets of human experience
- the interrelationships within and across disciplines

As *Empowered Learners* students will demonstrate:

- problem solving skills using a variety of methods and tools

As *Responsible Learners* students will demonstrate

- civic engagement

Religious Studies Required Course Content

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

- Introduce students to the study of religion as a means to understanding Western culture and therefore to understanding themselves.
- Provide a balanced, critical, nonsectarian examination of religion.
- Emphasize an interdisciplinary approach to the study of religion.
- Investigate the nature of religion and the forms of its expression or the foundational roots and development of one or more Western religious tradition(s) over a significant time span.
- Investigate relationships with non-Western traditions and cultures where appropriate.
- Give due attention to the religious involvement and perspectives of women and minorities.
- Acquaint students with religious texts and documents as appropriate and encourage the development of independent judgment and critical evaluation of moral issues raised by these texts and by religious thinkers.

Religious Studies Common Learning Objectives

All courses meeting the Religious Studies requirement will establish course objectives stating:

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

- become informed about the cultural / religious heritage of our society and the historical and political ramifications of the Judeo-Christian heritage;
- think critically about this heritage by careful attention to textual sources, artistic representations, autobiographical accounts, critical scholarly analyses and experiential study;
- show the ability to apply this information through enhanced communication skills, reflection and synthetic thinking, and analytical-critical abilities;
- develop and exercise responsible responses to the many challenges in a global society;
- think critically about fundamental issues of human existence;
- exhibit appropriate knowledge, skills and appreciation of religious studies as an academic discipline;
- provide broad knowledge of the beliefs and practices of major world religions;
- provide general knowledge of the different methodological approaches to the study of religion;
- demonstrate ability to write and research topics in our discipline;

C. Natural Science

Students are required to complete two (2) courses in Natural Science. Unless specified by their major department or college, students may choose Natural Science Option 1 of eight credits (two lab science courses) or Option 2 of seven credits (one lab science course and one non-lab science course). With either option students are not required to take the same science prefix for both courses unless that requirement is specified by their major department or college. Lab science courses cover a core set of laboratory practices and scientific methodology concepts and include a laboratory component for at least one credit.

In addition to these two required Natural Science courses, students must complete one additional Scientific Literacy Competency-Across-the-Curriculum (CAC) course. The Scientific Literacy CAC course may be accomplished in any other part of a student's curriculum including other Liberal Studies courses, major courses or electives.

1. Natural Science Lab-Science Courses

Lab-Science Courses Expected Undergraduate Student Learning Outcomes

Syllabi for all courses designed to meet the Liberal Studies Natural Science lab-science requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

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

As *Responsible Learners*

- intellectual honesty

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies Natural Science lab-science requirement:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the interrelationships within and across disciplines

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
- the ability to transform information into knowledge and knowledge into judgment and action

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

Lab Science Required Course Content

Courses designed to meet the Liberal Studies Natural Science lab-science requirement must:

- Examine a body of knowledge of natural science that will contribute to an understanding of the natural world and an appreciation of the impacts that natural sciences have on the lives of individuals and the world in which they live
- Provide students with an understanding of the emergence of scientific theories, their changing applications, and relationships among the natural sciences
- Ensure that students can formulate and test hypotheses
- Teach students to understand the appropriate role of science in decision making
- Provide an understanding of some of the "great moments" in the history of natural science and the individuals, including women and minorities, responsible for them
- Ensure that students learn, within a laboratory setting, to apply data-gathering techniques through their own observations
- Provide opportunities for students to develop skills in making accurate observations, in formulating concise and appropriate descriptions of natural phenomena, and in producing meaningful systems of classification for natural objects
- Provide students with opportunities to apply theories to practice in the working world of science

Additionally, individuals proposing courses to fulfill the Natural Science lab-science requirement are encouraged to include course material and instruction in which students:

- Present results in a variety of formats including textual, visual, and electronic.
- Synthesize various forms of information gathered and analyzed, and determine its effects on society
- Transform information, including domain knowledge and observations, into models which use statistics, spreadsheets, tables, graphs, curve fitting, maps, and other electronically mediated literacies to explore hypotheses and draw conclusions
- Incorporate content from disciplines outside of traditional science areas;
- Investigate relevance, application, and impact of science to student's life or field of study
- Develop skills in effective use of oral and written communication;
- Apply problem solving and critical thinking skills to reach conclusions including understanding the ethical and behavioral consequences of decisions and actions on the students, society, and the physical world

Lab Science Common Learning Objectives

All courses designed to fulfill the Liberal Studies Natural Science lab-science requirement will establish the following common course learning objectives.

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

- Analyze problems from the perspective of a natural scientist;
- Understand a body of knowledge in a science domain;
- Use laboratory and scientific methodology;
- Formulate and test hypotheses;
- Apply critical thinking skills including analysis, application, and evaluation to data from their own observations or from scholarly research sources;
- Demonstrate an understanding of ways to model the natural, social and technical worlds;
- Demonstrate problem solving skills using a variety of methods and tools;
- Gather and organize data either from their own observations and/or from scholarly research sources;
- Demonstrate an understanding of intellectual honesty in context of collecting laboratory data and the scientific method;
- Demonstrate an understanding of the ethical and behavioral consequences of decisions and actions on themselves, society, and the physical world.

<h3><u>2. Natural Science Non-lab Science courses</u></h3>

Non-lab Science Expected Undergraduate Student Learning Outcomes

Syllabi for courses meeting the Liberal Studies Natural Science non-lab course requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

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
- 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

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies Natural Sciences non-lab requirement:

As *Informed Learners* students will demonstrate knowledge and understanding of:

Liberal Studies Criteria

3/18/2009

- the interrelationships within and across disciplines

As *Empowered Learners* students will demonstrate:

- effective oral and written communication abilities
- ease with textual, visual and electronically-mediated literacies
- the ability to transform information into knowledge and knowledge into judgment and action
- reflective thinking and the ability to synthesize information and ideas

Non-lab Science Required Course Content

Courses designed to meet the Liberal Studies Natural Science non-lab science requirement must:

- Examine a body of knowledge of natural science that will contribute to an understanding of the natural world and an appreciation of the impacts that natural sciences have on the lives of individuals and the world in which they live
- Provide an understanding of the emergence of scientific theories, their changing applications, and relationships among the natural science.
- Ensure that students can formulate and test hypotheses
- Teach students to understand the appropriate role of science in decision making
- Provide an understanding of some of the "great moments" in the history of natural science and the individuals, including women and minorities, responsible for them
- Demonstrate the potential for misuse of science, as well as the many ways in which scientific knowledge helps solve problems
- Develop scientific methodology skills
- Apply methodology to challenging theoretical models and sets of data
- Help students develop an inquiring attitude consistent with the tenets of natural science, an attitude that is willing to expose fallacy on the basis of reason that demands evidence for scientific assertions, and yet is tolerant of hypotheses in the absence of contradictory evidence

Additionally, individuals proposing courses to fulfill the Natural Science non-lab science requirement are encouraged to include course material and instruction in which students:

- Present results in a variety of formats including textual, visual, and electronic
- Synthesize various forms of information gathered and analyzed, and determine its effects on society
- Transform information, including domain knowledge and observations, into models which use statistics, spreadsheets, tables, graphs, curve fitting, maps, and other electronically mediated literacies to explore hypotheses and draw conclusions
- Incorporate content from disciplines outside of traditional science areas
- Investigate relevance, application, and impact of science to student's life or field of study
- Develop skills in effective use of oral and written communication

- Apply problem solving and critical thinking skills to reach conclusions including understanding the ethical and behavioral consequences of decisions and actions on the students, society, and the physical world

Non-lab Science Common Learning Objectives

All courses designed to fulfill the Liberal Studies Natural Science non-lab science requirement will establish the following common course learning objectives.

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

- Analyze problems from the perspective of a natural scientist
- Understand a body of knowledge in a science domain
- Use laboratory and scientific methodology
- Formulate and test hypotheses
- Apply critical thinking skills including analysis, application, and evaluation to data from their own observations or from scholarly research sources
- Demonstrate an understanding of ways to model the natural, social and technical worlds
- Demonstrate problem solving skills using a variety of methods and tools
- Identify sources of data, including the ability to access, evaluate, interpret and use information from a variety of sources
- Gather and organize data either from their own observations and/or from scholarly research sources
- Demonstrate an understanding of intellectual honesty in context of collecting laboratory data and the scientific method
- Demonstrate an understanding of the ethical and behavioral consequences of decisions and actions on themselves, society, and the physical world

D. Social Science

To fulfill the Social Science requirement, students will complete three (3) courses from the list of approved options. Courses in this area introduce students to central concepts and methods of inquiry used to study human behavior, social processes and social institutions. Additionally, courses will emphasize the use of theory and empirical analysis to address the complexity of human behavior and the variety and connectedness of individuals and social institutions. A course or departmental prefix may be repeated one time. Only one course with a student's major prefix can be used to satisfy the requirements for this category.

A course or departmental prefix may be repeated one time.

Social Science Expected Undergraduate Student Learning Outcomes

Syllabi for courses meeting the Liberal Studies Social Science requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the ways of modeling the natural, social and technical worlds
- the past and present from historical, philosophical and social perspectives
- the interrelationships within and across disciplines

As *Empowered Learners* students will demonstrate:

- problem solving skills using a variety of methods and tools
- 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
- 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

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies Social Science requirement:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the human imagination, expression and traditions of many cultures
- the interrelationships within and across cultures and global communities

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

- the ability to transform information into knowledge and knowledge into judgment and action
 - the ability to work within complex systems and with diverse groups
- As *Responsible Learners* students will demonstrate:
- concern for social justice

Social Science Required Course Content

All courses designed to fulfill the Liberal Studies Social Science requirements must include content and instruction that:

- Allows students to apply empirical methodology and a theoretical framework to the study of the origins, development and maintenance of individual human behavior and social groups, institutions, and organizations
- Promotes an understanding of individuals, groups and their physical and social environment by exploring and analyzing concepts developed in the discipline(s).
- Includes, where appropriate, discussion of other cultures and subcultures, underrepresented groups, minorities, and women
- Conveys the major concepts, models, and critical intellectual questions/debates within one, or more, of the recognized social science academic disciplines.

In addition, individuals proposing courses to fulfill the Liberal Studies Social Science requirements are encouraged to include information and instruction that:

- Examines the nature of the reciprocal determinism which exists between individuals and their social environments
- Explores the values and ethical issues that underlie individual behavior and the functioning of social, political, economic, and cultural organizations
- Examines the historical foundations and future implications of contemporary social issues

Social Science Common Learning Objectives

All courses designed to fulfill the Liberal Studies Social Science requirements will establish the following common course learning objectives.

At the conclusion of the course the student will be able to demonstrate knowledge and understanding of:

- the ways of modeling individual and social behavior
- the past and present from historical, philosophical and social perspectives
- the interrelationships within and across disciplines
- problem solving skills using a variety of methods and tools
- critical thinking skills including analysis, application and evaluation
- reflective thinking and the ability to synthesize information and ideas
- intellectual honesty
- the ethical and behavioral consequences of decisions and actions on themselves, on society and on the physical world and a respect for the identities, histories, and cultures of others

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

E. Capstone

Students must complete one (1) course from the approved menu of Capstone courses in or out of their primary major. Students taking the Capstone through their major course of study will apply those credits to the major rather than Liberal Studies and those credits will also fulfill the Liberal Studies Capstone requirement.

Capstone Expected Undergraduate Student Learning Outcomes

Syllabi for courses meeting the Liberal Studies Capstone requirement must identify the following *Expected Undergraduate Student Learning Outcomes* as *primary* objectives:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the interrelationships within and across disciplines

As *Empowered Learners* students will demonstrate:

- effective oral and written communication abilities
- 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
- the ability to transform information into knowledge and knowledge into judgment and action
- reflective thinking and the ability to synthesize information and ideas

Additionally these courses will include as primary, at least one indicator from the Responsible Learner category of the Expected Undergraduate Student Learning Outcomes.

The following *Expected Undergraduate Student Learning Outcomes* are identified as *secondary* objectives for courses meeting the Liberal Studies Capstone requirement:

As *Empowered Learners* students will demonstrate:

- ease with textual, visual and electronically-mediated literacies
- the ability to work within complex systems and with diverse groups
- critical thinking skills including analysis, application and evaluation

Capstone Required Course Content

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

- *Reading/Research:* designed to demonstrate the interrelationship within and across disciplines, problem solving, information literacy skills, and reflective thinking.
- *Problem Solving:* The reading and research should be reported in the context of problem solving (a question to be studied, a problem to be resolved, or an issue to be carefully considered).

- *Writing:* With any capstone course, a formal, well-written product that demonstrates achievement of the primary objectives would be necessary. Such a paper would need to show reflective thinking about the topic and interrelationships within and across disciplines.
- *Performance-Based Project/Presentation/Community Service:* Beyond writing, all projects include an experience that shares and/or applies the knowledge gained.

Additionally, individuals proposing courses designed to fulfill the Liberal Studies Capstone requirement are encouraged to include:

- A variety of models such as student teaching, internships, research, performance arts, independent study, and study abroad
- Problem-based learning experiences that provide an opportunity to integrate disciplinary and LS knowledge. Opportunities to integrate the knowledge and express the ideas acquired throughout the college experience.
- Opportunities to either address issues in the community or to consider community/social implications of work.
- A presentation of Capstone work outside of class (perhaps schedule time for this as a block exam time for all Capstone courses, and have a university-wide Capstone Festival where this work is presented).
- Significant group or “complex system” experiences.

V. Competency-Across-the-Curriculum Categories

Students are required to complete courses that fulfill each of six (6) Competency-Across-the-Curriculum (CAC) Categories. Students are required to complete one course for each competency with the exception of the Written Communication Competency, for which students must complete two (2) courses. These competencies may be accomplished in any part of a student's curriculum including other Liberal Studies courses, major courses or electives with one exception. The exception is that one Written Communication Competency course must be completed in the student's primary major. A course may be designed enabling students to achieve two (2) but not more than two competencies within that course.

A. Global Citizenship Competency-Across-the-Curriculum

CRITERIA HAS NOT BEEN COMPLETED

B. Information Literacy Competency-Across-the-Curriculum

IUP Information Literacy Competency Standards are outlined in Appendix I

Information Literacy CAC Expected Undergraduate Student Learning Outcomes

Proposals for courses designed to fulfill the Information Literacy Competency-Across-the-Curriculum must identify the following Expected Undergraduate Student Learning Outcomes as primary objectives:

As Informed Learners student will demonstrate knowledge and understanding of:

- the aesthetic facets of human experience

As Empowered Learners students will demonstrate:

- effective oral and written communication abilities
- 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
- the ability to transform information into knowledge and knowledge into judgment and action
- the ability to work within complex systems and with diverse groups
- 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
- an understanding of the ethical and behavioral consequences of decisions and actions on themselves, on society and on the physical world

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives in Information Literacy Competency-Across-the-Curriculum courses:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the ways of modeling the natural, social and technical worlds
- the past and present from historical, philosophical and social perspectives
- the interrelationships within and across cultures and global communities
- the interrelationships within and across disciplines

As *Responsible Learners* student will demonstrate:

- concern for social justice
- civic engagement
- an understanding of themselves and a respect for the identities, histories, and cultures of others

Information Literacy CAC Required Course Content

Proposals for courses designed to fulfill the Information Literacy Competency-Across-the-Curriculum must include:

Course pedagogy and assignments designed to address each of the five standards from the IUP Information Literacy Competency Standards approved by the IUP Senate in April 2003 (See Appendix I).

Additionally, individuals proposing courses designed to fulfill the Information Literacy Competency-Across-the-Curriculum courses are encouraged to include:

- The use of information resources other than assigned texts or classroom materials
- Interaction with the Library's resources and/or with a librarian
- An understanding of how information is created organized and retrieved including both primary and secondary resources
- A pre-test and/or post test of information literacy skills and proficiency either conducted in each class or over a student's 4 years at IUP

All courses designed to fulfill the Information Literacy Competency-Across-the-Curriculum requirement will establish the following common course learning objectives.

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

- Identify and refine perceived information deficiencies, for example, what information is needed
- Identify and analyze sources of information, for example where is the information located
- Identify how the information will be obtained; and monitor the acquisition of information with an eye toward review and revision, for example when has enough information been gathered and evaluated
- Use efficient investigative methods to implement effective information search strategies

- Evaluate the quality of the information and use correct citation procedures
- Determine the veracity of supporting or conflicting information and viewpoints
- Incorporate appropriate information (regardless of format); revise interim results(s) as necessary and present the end result clearly and effectively to an intended audience

C. Oral Communication Competency-Across-the-Curriculum

Oral Communication CAC Expected Undergraduate Student Learning Outcomes

Proposals for courses designed to fulfill the Oral Communication Competency-Across-the-Curriculum must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

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

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives in Oral Communication Competency-Across-the-Curriculum courses:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the interrelationships within and across cultures and global communities
- the interrelationships within and across disciplines

As *Empowered Learning* students will demonstrate:

- ease with textual, visual and electronically-mediated literacies
- the ability to work within complex systems and with diverse groups
- intellectual honesty

As *Responsible Learners* students will demonstrate:

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

Oral Communication CAC Required Course Content

Proposals for courses designed to fulfill the Oral Communication Competency-Across-the Curriculum must include:

- content as the primary focus but reinforce oral communication skills by using oral communication activities (OCAs) in a substantial way to enhance learning
- oral communication activities that are integrated into the course content and not an "add-on" at the end of the semester
- guidance for students on researching and organizing their oral communication activities in ways that are appropriate to the course content
- assessment criteria, grading rubrics, and sample assignment instructions
- at least 40% of the total course grade based on oral communication activities

The following assessment strategies/activities must be included in the course content:

- a minimum of three oral communication activities (OCA), including at least one team or group activity

- a minimum of 30 minutes devoted to OCAs with each activity being at least 5 minutes long
- an opportunity for feedback from the instructor after each OCA and prior to the next one
- an opportunity for a reflection paper or self-analysis by the student after at least one oral communication activity
- an opportunity for peer feedback after at least one oral communication activity
- at least one oral communication activity based on an assignment, such as a report or research paper

Additionally, courses designed to fulfill the Oral Communication Competency-Across-the-Curriculum may include:

- Opportunities for the use of appropriate media and technology
- Opportunities to understand gender and cultural differences related to oral communication
- Opportunities for group problem-solving

Oral Communication CAC Common Learning Objectives

All courses meeting this competency will establish a course objective stating:
At the conclusion of the course the student will be able to effectively communicate course content through appropriate written and oral communication activities.

Suggested Oral Communication Activities

- Facilitating a class discussion
- Extemporaneous presentations
- Individual or team debate
- Informational, persuasive or instructional presentation
- Mock Trial
- Poster Session
- Research presentation
- Field Study Presentation
- Facilitating a group activity
- Case Study report
- Business/Professional presentation
 - Staff reports, business plans, crisis plans, progress reports
- Evaluations or recommendations of programs or policies
- Review/report on book or article

D. Quantitative Reasoning Competency-Across-the-Curriculum

Quantitative Reasoning CAC Expected Undergraduate Student Learning Outcomes

Syllabi for courses designed to meet the Liberal Studies Quantitative Reasoning Competency-Across-the-Curriculum requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

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

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies Quantitative Reasoning Competency-Across-the-Curriculum requirement:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the interrelationships within and across disciplines

As *Empowered Learners* students will demonstrate:

- the ability to transform information into knowledge and knowledge into judgment and action
- reflective thinking and the ability to synthesize information and ideas

Quantitative Reasoning CAC Required Course Content

Proposals for courses designed to fulfill the Liberal Studies Quantitative Reasoning Competency Courses must:

- Engage students in the interpretation, analysis and use of numerical and graphical data.
- Introduce quantitative methods in field specific contexts.
- Apply quantitative techniques to address problems within a specific discipline.
- Develop logical and deductive reasoning.

Additionally, individuals proposing courses to meet the Quantitative Reasoning Competency Across-the-Curriculum are encouraged to include course content that will:

- Increase student confidence and ability in using numbers
- Promote understanding and use of mathematical formulas
- Introduce the appropriate use of technology as a tool in problem solving
- Enable informed, critical response to issues that can be addressed quantitatively
- Allow students to apply quantitative reasoning across multiple disciplines
- Enable students to apply quantitative reasoning to practical problems

Quantitative Reasoning CAC Common Learning Objectives

All courses proposed to fulfill the competency must establish the following common learning objectives:

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

- interpret, analyze and use numerical data and graphs
- understand quantitative methodology within the field addressed by the course
- apply quantitative reasoning to a problem within a specific discipline
- critically assess the validity of an argument based on quantitative analysis

E. Scientific Literacy Competency-Across-the-Curriculum

Scientific Literacy CAC Expected Undergraduate Student Learning Outcomes

Syllabi for courses designed to meet the Liberal Studies Scientific Literacy Competency-Across-the-Curriculum requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

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

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies Scientific Literacy Competency-Across-the-Curriculum requirement:

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:

- ease with textual, visual and electronically-mediated literacies
- the ability to transform information into knowledge and knowledge into judgment and action
- reflective thinking and the ability to synthesize information and ideas

As *Responsible Learners* students will demonstrate:

- concern for social justice

Scientific Literacy CAC Required Course Content

Proposals for courses designed to fulfill the Scientific Literacy Competency-Across-the-Curriculum must:

- Have at least 50% of the course content be scientific domain knowledge as employed in the investigation of the course subject matter
- Investigate relevance, application, and impact of science to student's life or field of study
- Incorporate content from disciplines outside of traditional science areas
- Apply problem solving and critical thinking skills to reach conclusions including understanding the ethical and behavioral consequences of decisions and actions on the students, society, and the physical world

- Include several specific assignments in which students use inductive or deductive approaches that require students to make their own observations and/or collect and analyze data (e.g. formulate and test hypotheses) from existing scholarly research sources

Additionally, Scientific Literacy Competency-Across-the Curriculum courses:

- Can be laboratory or non-laboratory;
- Cannot be courses taken to fulfill the Liberal Studies Natural Science requirement

Additionally, individuals proposing courses to fulfill the Scientific Literacy Competency-Across-the Curriculum courses are encouraged to include:

- Opportunities to present results in a variety of formats including textual, visual, and electronic
- Opportunities to synthesize various forms of information gathered and analyzed, and determine its effects on society.
- Course content that requires students to transform information, including domain knowledge and observations, into models which use statistics, spreadsheets, tables, graphs, curve fitting, maps, and other electronically mediated literacies to explore hypotheses and draw conclusions.
- Content to provide students an understanding of some of the "great moments" in the history of science and the individuals, including women and minorities, responsible for them.

Scientific Literacy CAC Common Learning Objectives

All courses meeting this competency will establish course objectives stating:

At the conclusion of the courses students will be able to:

- Analyze problems from the perspective of a natural scientist;
- Demonstrate knowledge and understanding of the significance and relationship of science to their field of study.
- Demonstrate problem solving skills using a variety of methods and tools;
- Identify sources of data, including the ability to access, evaluate, interpret and use information from a variety of sources;
- Gather and organize data either from their own observations or from scholarly research sources;
- Demonstrate an understanding of the ethical and behavioral consequences of decisions and actions on themselves, society, and the physical world.

F. Written Communication Competency-Across-the-Curriculum

Written Communication CAC Expected Undergraduate Student Learning Outcomes

Syllabi for courses designed to meet the Liberal Studies Written Communication Competency-Across-the-Curriculum requirement must identify the following Expected Undergraduate Student Learning Outcomes as *primary* objectives:

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

The following Expected Undergraduate Student Learning Outcomes are identified as *secondary* objectives for courses meeting the Liberal Studies Written Communication Competency-Across-the-Curriculum requirement:

As *Informed Learners* students will demonstrate knowledge and understanding of:

- the interrelationships within and across disciplines

As *Empowered Learners* students will demonstrate:

- ease with textual, visual and electronically-mediated literacies
- problem solving skills using a variety of methods and tools
- the ability to transform information into knowledge and knowledge into judgment and action
- the ability to work within complex systems and with diverse groups

As *Responsible Learners* students will demonstrate:

- 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

Written Communication CAC Required Course Content

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

- Carefully designed writing assignments that increase student learning and enhance student ability to write. The types of assignments must include both writing to learn and writing to communicate.

- Guidance to students in conceiving, organizing, and presenting written material in ways appropriate to the subject being studied.
- Attention to both the process and product of writing. Intervention in the writing process, particularly in its early stages, is a highly effective way of helping students produce better written work. For example, students can be assisted with task definition, topic selection, information gathering, organization and formatting, and revision strategies. Major assignments should have clearly defined stages of preparation and regular progress reviews.
- Ample opportunities for students to improve their writing skills and to have at least 5000 words (approximately 15-20 typed pages) comprising two or more separate assignments, at least one of which involves sequenced components, evaluated by an instructor. Depending on the nature of the course, appropriate writing assignments may include such formats as case studies, laboratory reports, journals, letters, memos, formal essays, research articles, project or grant proposals, and so forth. A sequenced assignment must build on itself so that students are involved in each step of the writing process.
- An opportunity for students to revise at least one of their writing assignments after receiving comments geared towards revision from the professor.
- At least one assignment that requires students to produce finished, edited prose, with whatever informal or draft writing is appropriate.
- The improvement of writing as a course objective in the syllabus.
- Criteria for evaluation of major assignments, including specific written instructions.
- Written assignments that compose a major part of the final grade; in most cases, this should be 50% or more.

Written Communication CAC Common Learning Objectives

All courses meeting this competency will establish common course objectives stating:

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

- Effectively communicate in writing, including development, focus, organization, and clarity, both in and outside of the discipline.
- Respond critically and analytically to materials and sources relevant to the course content and design.
- Understand and apply the appropriate process for using, attributing, and documenting sources.
- Discuss/critique their own writing
- Develop a piece of writing for his/her e-portfolio using instructor feedback.

The National Council of Teachers of English recommends class sizes of no more than 20 for composition courses. With this in mind, W courses should have no more than 25 students per section.

Appendix I

IUP Information Literacy Competency Standards

Adapted 12/14/01 from the Association of College and Research Libraries, 2000;
Approved by IUP Senate, April 2003

Standard 1: The information literate person determines the nature and extent of the information needed.

Performance Indicators: The information literate person:

1. defines and articulates the need for information.
2. identifies a variety of types and formats of potential sources for information.
3. considers the costs and benefits of acquiring the needed information.
4. reevaluates the nature and extent of the information need.

Outcomes Include:

The person is able to identify and refine perceived information deficiencies, i.e., what information is needed; identify and analyze sources of information, i.e., where is the information located; analyze the financial and logistic implications of acquiring information, i.e., how will the information be obtained; and monitor the acquisition of information with an eye toward review and revision, i.e., when has enough information been gathered and evaluated

Standard 2: The information literate person accesses needed information effectively and efficiently.

Performance Indicators: The information literate person:

1. selects the most appropriate investigative methods or information retrieval systems for accessing the needed information.
2. constructs and implements effectively-designed search strategies.
3. retrieves information online or in person using a variety of methods.
4. refines the search strategy if necessary.
5. extracts, records, and manages the information and its sources.

Outcomes Include:

Using efficient investigative methods, the person will implement effective information search strategies that will be beneficial in extracting and managing needed information. The research plan will utilize effective keywords, discipline-specific vocabulary, and a variety of search systems including library sources, online search engines, and other forms of inquiry, i.e., surveys and interviews. The person will evaluate the quality of the information and use correct citation procedures.

Standard 3: The information literate person evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value systems.

Performance Indicators: The information literate person:

1. summarizes the main ideas to be extracted from the information gathered.

2. articulates and applies initial criteria for evaluating both the information and its sources.
3. synthesizes main ideas to construct new concepts.
4. compares new knowledge with prior knowledge to determine the value added, contradictions, or other unique characteristics of the information.
5. determines whether the new knowledge has an impact on the individual's value system and takes steps to reconcile differences.
6. validates understanding and interpretation of the information through discourse with other individuals, subject area experts, and/or practitioners.
7. determines whether the initial query should be revised.

Outcomes Include:

The person will have an understanding of relevant information and the evaluation of the resource where the information was found as the first step to being able to then manipulate the information in various multimedia or software programs. The person will then determine supporting or conflicting information and viewpoints through comparison of information or discussion with others, in order to conclude whether or not the need for information has been satisfied.

Standard 4: The information literate person, individually or as a member of a group, uses information effectively to accomplish a specific purpose.

Performance Indicators: The information literate person:

1. applies new and prior information to the planning and creation of a particular product or performance.
2. revises the development process for the product or performance.
3. communicates the product or performance effectively to others.

Outcomes Include:

The person is able to plan and efficiently organize for an end result; incorporates all appropriate information (regardless of format); revises interim results(s) as necessary and is able to present the end result clearly and effectively to an intended audience.

Standard 5: The information literate person understands context, meaning, many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

Performance Indicators: The information literate person:

1. understands many of the ethical, legal, and socio-economic issues surrounding information and information technology.
2. follows laws, regulations, institutional policies, and etiquette related to the access and use of information resources.
3. acknowledges the use of information sources in communicating the product or performance.

Outcomes include:

The person should know and respect privacy rights, netiquette, and copyrights. The person should also understand censorship and plagiarism issues. Finally, the information literate person must also know how to cite sources appropriately.

Appendix II
Critical Reading & Thinking Defined

DRAFT