

## 2009-2010 Academic Assessment at Lindenwood University

Section 2: General Education

#### **TABLE OF CONTENTS**

ntroduction	
General Education Objectives	
Written and Oral Communications	
English Composition	
Oral Communications	
Analysis of Written and Oral Communications for 2009-10	
Humanities	
Literature Courses	
Philosophy/Religion	33
Philosophy	33
Religion	35
Analysis of Humanities for 2009-10	38
Fine and Performing Arts	
Art	40
Dance	42
Music	45
Theatre	46
Analysis of Fine and Performing Arts for 2009-10	49
Civilization/Cross Cultural	51
Civilization	51
Foreign Language/Cross Cultural	53
Foreign Languages	53
Mandarin Chinese	53
French	54
German	58
Spanish	59
Cross Cultural	62
Analysis of Civilization/Cross-Cultural for 2009-10	67
American History and Government	
History	
Government	
Analysis of American History/Government for 2009-10	
Social Sciences	
Anthropology	
Criminal Justice	
Psychology	
Social Work	
Sociology	
Analysis of Social Sciences for 2009-10	
Mathematics and Natural Sciences	
Mathematics	96

# Lindenwood University ii General Education Assessment

Natural Sciences	107
Biology	107
Chemistry	
Earth Science	112
Analysis of Mathematics and Natural Sciences for 2009-10	118
CBASE	119
Assessment of General Education Overview	122
General Education Action Plan	125

## Introduction

Lindenwood University believes that the purpose of education is to enhance the whole person. To this end, the University's general education (GE) program is designed to give students a core of knowledge, experiences, and skills that should be common to all college-educated individuals. The GE classes introduce students to a variety of thoughts, ideas, and ways of viewing the world. They are the beginning of the process of education for our students; it is a process which will continue not only throughout their formal education, but throughout their lives.

To accomplish this purpose, the Lindenwood GE program is designed to aim toward two general goals:

- 1. To expose students to a broad series of ideas, concepts, cultures, and thought processes.
- 2. To learn how to critically think about and communicate ideas.

These broad concepts are manifested in a more specific set of goals that reflects the joint efforts of the Lindenwood faculty and students. Through teaching and learning in an atmosphere of academic freedom, students will be able to

- develop as more complete human beings who think and act freely both as individuals and as community members;
- gain the intellectual tools and apply the range of perspective needed to understand human cultures as they have been, as they are, and as they might become;
- apply the basic skills listening, speaking, reading, writing, researching, observing, reflecting, and other forms of intellectual interaction – needed for the productive communication and study of ideas;
- acquire the propensity for and ability to engage in divergent and creative thinking directed toward synthesis, evaluation, and integration of ideas;
- apply analytical reasoning to both qualitative and quantitative evidence;
- acquire guidelines for making informed, independent, socially-responsible decisions, respectful of others and the environment, and develop a willingness to act accordingly.

The current University GE program is a cross between a class-based and a knowledge (concept)/skills-based system in which classes are broken into eight objectives and seven knowledge (concept)/skills areas. The broad range of categories of classes students must take require them to be exposed to ideas, concepts, and skills they might, on their own, never choose to come in contact with. The requirements in science, history, and composition are particular strong points, but the whole program is as strong as any four-year institution. Our GE program is one of the great strengths of the University's liberal arts education.

While the University has had an effective assessment program for our GE program for many years, we are continuing to develop more effective assessment of those classes. Assessment has been, and will continue to be, important to our understanding of the effectiveness of GE at Lindenwood. The University realizes that the eight general education objectives are also taught throughout the curriculum during a student's entire academic career, thus the classes students take within their major also play a significant role in achieving our general education goals. For this reason, in the coming years the University will be working to expand its view of general education and examine the GE goals in a more comprehensive manner.

## **General Education Objectives**

The following are the general education objectives and a list of some of the courses that both meet the University's requirements and create the groundwork for fulfilling the objective.

Through the joint efforts of Lindenwood faculty and students in teaching and learning, students will be able to do the following:

- 1. Develop a clear written and oral argument, to include the following:
  - State a thesis clearly.
  - Illustrate generalizations with specific examples.
  - Support conclusions with concrete evidence.
  - Organize the argument with logical progression from induction through the body to a conclusion.

Classes: Written and Oral Communications

**English Composition** 

Composition I ENG 15000

English Composition for Non-Native Speakers EPP 15000

Composition II - ENG 17000

Writing Proficiency Lab - ENG 21000

Communications

Effective Speaking/Group Dynamics - COM 10500

Fundamentals of Oral Communication - COM 11000

Cross Cultural Communication - SW 10000

2. Demonstrate the computational skills necessary to solve specified types of mathematical problems and correctly select and apply the mathematical principles necessary to solve logical and quantitative problems presented in a variety of contexts.

Classes: Mathematics

Contemporary Math - MTH 12100 Quantitative Methods - MTH 13100 Concepts of Math I - MTH 13400 Concepts of Math II - MTH 13500 Basic Statistics - MTH 14100 College Algebra - MTH 15100 Pre-calculus - MTH 15200 Survey of Calculus - MTH 17100 Statistics for the Natural Sciences - MTH 24100 Calculus I - MTH 27100 Calculus II - MTH 27200 Modern Symbolic Logic - PHL 21600

3. Recognize and identify the fundamental concepts, principles, and professional vocabulary of several specific social science disciplines and demonstrate an awareness of how such concepts and principles influence behavior and values at the individual, social, and cultural levels.

Classes: Social Sciences

Anthropology

Cultural Anthropology - ANT 11200 **Human Evolution - ANT 12200** 

**Criminal Justice** 

Criminology - CJ 20000

**Economics** 

Survey of Economics - ECON 23010

Principles of Microeconomics – ECON 23020

Psychology

Principles of Psychology -PSY 10000

Interactive Psychology - PSY 10100 (not for Psychology majors)

**Recreation Leadership** 

Leisure and Quality of Life - RLS 30000

Social Work

Human Diversity & Social Justice - SW 24000

Human Behavior in the Social Environment - SW 28000

Sociology

Basic Concepts Of Sociology - SOC 10200

The Family - SOC 21400

Social Problems - SOC 22000

Sociology of Gender Roles - SOC 24000

4. Recognize and identify relationships among the forms and techniques of the visual and/or performing arts and demonstrate an awareness of the historical role played by the arts in shaping and expressing human values at the individual and cultural levels.

Classes: Fine and Performing Arts

Art

Fundamentals of Drawing - ART 10000

3-D Design - ART 13600

Introduction to Photography - ART 18100

Introduction to Digital Photography - ART 18101

Concepts in the Visual Arts - ART 21000

History of Art - ART 22000

Introduction to Ceramics - ART 24000

Dance

Introduction to Dance - DAN 10100

Dance as an Art - DAN 11000

Dance in the 20<sup>th</sup> Century - DAN 37100

Music

Music in America - MUS 15000

Introduction to Music - MUS 16500

Music Business - MUS 33000 History of Music I - MUS 35500 History of Music II - MUS 35600

World Music - MUS 35700

Theatre

Fundamentals of Acting - TA 10500

Introduction to Technical Theatre I - TA 11100

Introduction to Theatrical Arts - TA 11700

History of Costume and Fashion - TA 31700

Modern Drama - TA 33500

Survey of Dramatic Literature - TA 33600

History of Theater - TA 37000

Special Topics – TA 38600/38700

5. Demonstrate a grasp of the scientific method and the fundamental concepts and principles of several specific disciplines drawn from the biological, physical, and earth sciences. Identify how these concepts and principles relate to historical and contemporary scientific discoveries and to the interrelationship between human society and the natural world.

Classes: Natural Science - the classes that fulfill the GE requirement differ for science majors; those differences will be discusses in the program report.

Biology

Concepts in Biology - BIO 10000 (4 hours)

Modern Topics in Biology - BIO 10600

Human Biology - BIO 10700

Principles of Biology - BIO 11000

Environmental Biology - BIO 11200 (4 hours)

Principles of Environmental Biology - BIO 11400

Environmental Biology Lab - BIO 11500 (1 hours)

Nutrition - BIO 12100

General Biology I w/ lab - BIO 25100

General Biology II w/lab - BIO 25200

Human Anatomy and Physiology w/lab - PE 20700 (4

hours)

Ethical Problems in Science - SCI 21400

#### **Earth Sciences**

Physical Geology - ESC 10000

Survey of Geology - ESC 10500

Introductory Meteorology - ESC 11000

Oceanography - ESC 12000

Introductory Astronomy - ESC 13000

#### **Physical Science**

Concepts of Chemistry - CHM 10000

World of Chemistry - CHM 10100

Chemistry in Society - CHM 10500

Environmental Science - CHM 11100

Concepts of Physics - PHY 11100

Concepts of Physics lab - PHY 11200 (1 hour)

6. Recognize and identify relationships among seminal human ideas, values, and institutions in Western and non-Western societies and demonstrate a grasp of their historical development in aesthetic, intellectual, political, and social contexts.

#### Classes

#### Civilization

World History:

World History - His 10000

Philosophy and Religion:

The Moral Life: A Study in Ethics - PHL 10200

Introduction to Philosophy - PHL 15000

Special Topics - PHL 18000/18100

Philosophy of Human Nature - PHL 19000

Ethics - PHL 21400

Traditional Logic - PHL 21500

Bioethics - PHL 24000

Contemporary Moral Theory – PHL 25000

Dante and Virtues - PHL 25200

Philosophy of Science - PHL 26500

Special Topics - PHL 28000/28100

Political Philosophy - PHL/PS 30500

Ancient Philosophy - PHL 31100

Medieval/Renaissance Philosophy - PHL 31200

Modern Philosophy - PHL 31300

Philosophy of Religion - PHL/REL 32500

Introduction to Religion - REL 10000

World's Sacred Texts - REL 13000

World Religions - REL 15000

Religion in America - REL 20200

Old Testament - REL 21000

New Testament - REL 21100

Practices of Religion - REL 22000

Special Topics - REL 28000/28100

Religion, Science, and Faith - REL 30000

Psychology of Religion - REL/PSY 30500

Christian Doctrine - REL 32000

Philosophy of Religion – REL/PHL 32500

Special Topics - PHL 28000/28100

#### Cross Cultural / Foreign Language:

#### **Cross Cultural**

Cultural Anthropology - ANT 11200

Native American Indians - ANT 21000

Focus on Modern Asia - ANT 30000

Social and Cultural Change - ANT 31700

Religion and Culture - ANT 32400

Islamic Societies - ANT 33400

History of Art - ART 22000

Nineteenth Century Art - ART 35400

Baroque Art - ART 35600

Ancient Art - ART 35700

Twentieth Century Art / Modern - ART 36100

Twentieth Century Art / Contemporary - ART 36200

Women Artists - ART 36300

Renaissance Art - ART 38300

Current Economic & Social Issues - ECON 33035

International Business and Cross Cultural Communications - INTL 48070

Comparative Criminal Justice Studies - CJ 22500

History of Film - COM 37000

Asian Cinema - COM 38601

Dance as an Art - DAN 11000

Dance in the 21st Century - DAN 37100

World Lit I - ENG 20100

World Lit II - ENG 20200

Comedy: Its Origin and Development - ENG 21600

Special Topics – ENG 28100

Modern Drama - ENG/TA 33500

Folklore and Fables - ENG 34500

Myth and Civilization - ENG 35000

Special Topics – ENG 38100

Chinese Culture - FLC 10300

History of French Civilization - FLF 33700

Masterpieces of French Literature to 1800 - FLF 35000

Masterpieces of French Literature since 1800 - FLF 35100

Seminar on Selected Authors and Genres of French Literature - FLF 40000

From the Berlin Wall to the Bavarian Alps – FLG 32000

Special Topics in German – FLG 38000

Advanced Spanish Conversation and Grammar – FLS 31100

Advanced Spanish Conversation and Grammar – FLS 31200

Travel Experience in Spanish Speaking Country - FLS 32000

Peninsular Spanish Culture and Civilization - FLS 33500

Latin American Culture and Civilization - FLS 33600

Masterpieces of Peninsular Spanish Literature - FLS 35000

Masterpieces of Spanish-American Literature - FLS 35100

Seminar on Selected Authors and Genres of Spanish and Spanish-American

Literature - FLS 37000

World Regional Geography - GEO 20100

Concepts of Geography – GEO 20200

World Economic Geography – GEO 20700

History of Asia - HIS 20500

History of Latin America - HIS 22000

History of Western Music I - MUS 35500

History of Western Music II - MUS 35600

World Music - MUS 35700

Selected Topics in Philosophy – PHL 18100

Selected Topics in Philosophy – PHL 28100

Asian Philosophy - PHL 31800

Selected Topics in Philosophy - PHL 38100

Comparative Analysis - PS 30000

International Relations - PS 35000

World Religions - REL 15000

Practices of Religion - REL 22000

Asian Religions - REL 23000

Selected Topics in Religion – REL 28100

Selected Topics in Religion – REL 38100

Race and Ethnicity: A Global Perspective - SOC 31800

Survey of Dramatic Literature - TA 33600

History of Theatre - TA 37000

Special topics in Theater – TA 38700

#### Foreign Languages:

Elementary - French I - FLF 10100 Elementary - French II - FLF 10200 Intermediate French I - FLF 20100 Intermediate French II - FLF 202 00 Elementary German I - FLG 10100 Elementary German II - FLG 10200 Intermediate German I - FLG 20100 Intermediate German II - FLG 20200 Elementary Spanish I - FLS 10100 Elementary Spanish II - FLS 10200 Intermediate Spanish I - FLS 20100 Intermediate Spanish II - FLS 20200

Elementary Chinese - FLC 10100 Elementary Chinese II - FLC 10200

7. Recognize and identify relationships among political systems and policy-making processes in the United States and demonstrate awareness of their historical development and

Classes: American Government / American History

History

America: Colony to Civil War - HIS 10500

contemporary manifestations at the federal, state, and local levels.

America: Civil War to World Power - HIS 10600

Government

American Government: The Nation - PS 15500 American Government: The States - PS 15600 US Government: Politics and History - HIS 15500

8. Demonstrate fundamental proficiency in literary analysis, apply those skills in interpretive and expressive exercises related to specific works of literature, and identify the usefulness of literature in assessing human behavior and values.

Classes: Literature

All of the literature classes offered at Lindenwood University by the English Department fulfill this goal of the University. The following are a few examples, not a comprehensive list, of those classes:

Introduction to Literature – ENG 20000

World Literature I - ENG 20100

World Literature II - ENG 20200

Comedy: Its Origin and Development - ENG 21600

American Literature I - ENG 23500

American Literature II - ENG 23600

African American Literature - ENG 27600

Latino Literature - ENG 27800

Selected Topics in Literature - ENG 208000/28100

British Literature I - ENG 30500

British Literature II - ENG 30600

The English Novel - ENG 30900

Modern Fiction - ENG 31000

Chaucer - ENG 33200

Shakespeare - ENG 33300

Modern Drama - ENG/TA 33500

Survey of American Literature - ENG 33700

Medieval English Literature - ENG 33800

Renaissance English Literature - ENG 33900

Restoration and 18<sup>th</sup> Century Literature - ENG 34100

English Romantic Literature - ENG 34200

Victorian Literature - ENG 34300

Folklore and Fables: The Telling of Tales - ENG 34500

Topics in American Literature - ENG 34700

Myth and Civilization - ENG 35000

Modern Poetry - ENG 35100

Epic and Tragedy: The Hero and the City - ENG 35600

Advanced Topics in Literature - ENG 38000

Advanced Topics in Literature - ENG 38100

Survey of Dramatic Literature - TA 33600

In order to achieve these 8 goals, the Lindenwood faculty has created 7 categories of classes, each of which plays a significant role in meeting the University's desired GE outcomes. The following is the pattern of courses required for the bachelor of arts and bachelor of science degrees under the general education requirement at Lindenwood for 2009-10.

English Composition (6 hours)

Two Composition courses:

ENG 15000

ENG 17000

Communications (3 hours)

Humanities (9 hours)

Two courses in Literature (6 hours) One course in Philosophy or Religion (3 hours)

Fine Arts

Arts, One course (3 hours)

Civilization (B.A. – 9 hours; B.S. – 3 hours) HIS 100 World History (3 hours)

> Cross Cultural or Foreign Language (6 hours) - Cross Cultural courses are not required for the B.S.

Social Sciences (9 hours)

American History or American Government (3 hours) Anthropology, Criminology, Sociology, Psychology, Economics (6 hours from two areas)

Natural Science and Mathematics (B.A. - 10 hours; B.S. - 16 hours)

Mathematics (3 hours) (6 hours required for the B.S.)

Natural Science:

For the B.A. degree: Two courses, representing two of the following areas:

Earth, Physical, or Biological Science, at least one of which must have a lab (7 hours)

For the B.S. degree: three courses, representing two of the following areas:

Earth, Physical, or Biological Science, at least one of which must have a lab (10 hours).

Totals:

Bachelor of Arts - 49-50 hours Bachelor of Science – 49-50 hours

Syllabi for courses satisfying the general education requirements are constructed to reflect the goals, objectives, and purposes of the general education program. A wide variety of summative and formative assessment instruments are used to measure student learning in general and the GE program in specific.

Over time, schools and departments periodically discover that their assessment tools are no longer giving them the data that they need for the continuous improvement of the University's general education program. When this occurs they discard the previous methods and focus on putting in place new tools, methods, and procedures in order to assess the success of the GE classes. Since Lindenwood students take a variety of courses to fulfill their general education requirements, no single method of assessment, such as a single comprehensive examination, will work. We use a third-party English examination for those completing the ENG 17000 requirement or who have transferred in having a course equivalent to ENG 17000. We will continue to use the CBASE and Praxis examinations, which are standardized instruments

required of prospective teachers, to provide comparison with the broad cohort to which our education students belong.

The General Education and Assessment Committees have agreed to continue implementation of measurements of our success in conveying "core competencies" related to our general education goals, a process that began during the academic year 1999-00. Individual academic areas continue to develop and refine methods that will be scored locally and then tabulated for inclusion in a review of the GE program's success.

### **General Education Assessment by Area**

### Written and Oral Communications

### **English Composition**

The ability to communicate through the use of the written word is considered an essential skill for any college educated individual. Lindenwood believes that this skill will become more important in the age of technology. Writing, even in abbreviated forms such as text messages and tweets, but most especially e-mails, are once again bringing the ability to communicate clearly in writing back to the forefront of communications.

#### 10000 Level Classes

In the fall of 2008, the University began using a new writing assessment system. The new system is computer based and designed to give a more consistent and, hopefully, more accurate placement for our students for their first English course at Lindenwood. We believe that the system will be able to cut down the failure rate in our ENG 15000 classes by placing students who are not prepared for the class are placed in our ENG 11000 class in order to give them the additional help they need in order to succeed at college-level writing.

#### ENG 11000 - Effective Writing

Students in ENG 11000 use a computer component of My Writing Lab in conjunction with the classroom activities and papers. My Writing Lab asks students to learn in three ways: recall, apply, and write. The recall section asks students to answer the questions based on their knowledge of specific grammar rules. The apply section asks the students to edit a prewritten paragraph for a specific grammar error. The write section asks the students to correctly rewrite a paragraph based on the principle being taught. (For example, if the lesson covers compound sentences, the student will be given a series of simple sentences and will be asked to combine those sentences into compound sentences.)

#### Results

	Pre-Diagnostic Average Score	Post-Diagnostic Average Score	Difference
Sentence Grammar	47%	77%	30
Punctuation and Mechanics	70%	79%	9
Usage and Style	72%	86%	14
Basic Grammar	74%	85%	11

#### Observations

Based on the pre- and post-assessment scores, it is apparent that the scores (as a whole) increased considerably in all areas. However, the "Sentence Grammar" area showed significant improvement with a difference of thirty percent. While the program is good, the increase in this area does not correspond with the increase in the other three areas: Punctuation and Mechanics, Usage and Style, and Basic Grammar. This increase can be attributed to the writing exercises (beyond the computer work) completed in class. Students are expected to write and revise several papers during the course of the semester.

#### Action Plan:

- 1. Continue using My Writing Lab for all the grammar exercises.
- 2. Require students to meet a minimum average score in each grammar topic. For instance, students should be required to prove mastery of a topic by scoring an average of eighty percent on three exercise sets in each topic.
- 3. Require students who do not master the topic with three exercise sets to complete more exercise sets until mastery is attained.
- 4. Continue to incorporate various written assignments that require students to practice newly mastered grammar topics.

#### English 15000 - Composition I

#### Course Goals

The broader purposes of the course asks students to

- 1. understand that writing is a process and not just a product,
- 2. critically compare ideas and information and synthesize material to achieve specific purposes,
- 3. analyze and evaluate their own writing and that of others,
- 4. read and write more effectively and efficiently whatever the purpose.

#### **Course Objectives**

More specifically, upon completion of English 15000 students should be able to

- 1. write an essay that has a clear thesis and is cogently developed and adequately supported,
- 2. choose an effective rhetorical strategy or strategies to achieve a particular purpose,
- 3. understand the concepts of diction, style, and tone and manage them effectively,
- 4. edit for Standard American grammar, spelling, punctuation, usage, and mechanics.

#### Procedure

The ENG 15000 assessment for the year 2009-2010 was a trial-run project intended to discover whether a more technologically driven approach might be successful. A committee of five members designed and implemented a method for eliciting short essays (750-1500 words) from a percentage of students enrolled in the ENG 15000 course in the spring of 2010. The students were asked to submit a comparison-contrast essay via e-mail to an account set up by Lindenwood's Internet Services Department. We received 53 essays in all, a little short of what was hoped for but substantive enough to allow for following through on the test project.

#### Results

During the weeks following the end of the semester, the committee met to evaluate the essays. We graded the essays individually by placing them in electronic folders within the e-mail account. Then we met as a group to discuss discrepant grades for particular essays. We were able to reach the following consensus on the essays' grades:

•	A grades	6 essays
•	B grades	13 essays
•	C grades	21 essays
•	D grades	12 essays
•	F grades	1 essay

- 75.4% of the essays showed C or better work
- 98% were considered passing at the D or above levels

This limited sample allows a few conclusions. First, the sample of students earned grades one might expect or even hope for in a well-taught course, with bell-curve numbers overall and more As than Fs. Second, the process itself showed that reading the essays individually and discussing them afterwards will allow the readers a thorough understanding of the students' work. Finally, the discussion portion of the committee's

work gave an opportunity to refine our sense of the project as a whole and each student's work in particular.

The final conclusion of our committee's test project, however, is that it will not be possible for a full year of composition courses. It was quite time-consuming to read and evaluate even a relatively small percentage of our students' work. Unless the administration is willing to invest in paid readers, this will not be a workable solution.

#### Action Plan

We discussed several alternatives at the end of our final meeting, the most promising of which was the suggestion that we make use of Criterion's testing capabilities. We propose that our department perform another trial project. We would like 6-8 instructors/professors in ENG 15000 to volunteer to give a final exam that will be an essay typed by students outside of class (perhaps in class if this is logistically possible) and submitted to Criterion. This exam will be graded by Criterion and will be figured into the final grade of the course, ensuring optimal student effort. An ENG 15000 committee will facilitate the testing itself and monitor the test results in both the fall and spring. This committee will then compare the Criterion trial project with this year's effort and make a recommendation for the ENG assessment tool.

#### English 17000 - Composition II

#### Course Goal

The broader purposes of the course are to

- reinforce and build upon the basic language skills developed in English 150,
- 2. improve critical-thinking skills,
- 3. achieve greater stylistic maturity,
- 4. introduce the techniques of research and of writing the research argument.

#### Course Objectives

More specifically, upon completion of English 17000 students should be able to

- 1. write a clear, coherent, persuasive essay with an explicitly stated thesis,
- 2. research both print and electronic sources and assess their applicability and quality,
- 3. write effective summaries and paraphrases of research materials,
- 4. use quotations and other borrowed materials judiciously and introduce them in a variety of ways,
- 5. identify the parts of an argument and apply them in a persuasive essay,
- 6. recognize fallacious reasoning and explain why it is fallacious,
- 7. document a research essay correctly using a standard academic format.

#### Procedure and Rationale

The test used this year was newly revised. Students were given a multiple-choice preand post-test. Specifically, questions 1-3 deal with citations of borrowed material; questions 4–8 cover different types of proof; questions 9–10 ask students to differentiate between appeals to logos, pathos, and ethos; questions 12-13 cover Toulman's model of argumentation; question 14 asks students to consider a proof in the context of an argument and determine which fallacy is represented; question 15 deals with the matter of audience; and questions 16-20 ask students to identify fallacies.

Results (based upon a sample of 65 students from 5 sections)

Section	Pre-test	Post-test	Difference	% Change
Citations	99	118	19	19%
Proofs	100	111	11	11%
Logos, Pathos, and Ethos	29	29	0	0%
Toulmans' Model of	33	41	8	24%
Argumentation				
Fallacy's in context	20	16	-4	-20%
Audience	13	9	-4	-31%
Fallacy's	137	133	-4	-3%

#### Observations

Because this was a new test, comparison to previous years' assessments is not possible. Unfortunately, we now feel that some of the questions in this latest revision are ambiguous or otherwise misleading. We do not believe it is possible to draw any meaningful conclusions from this year's assessment.

#### Action Plan

Next fall we will discuss how we might improve the English 17000 assessment.

#### **Oral Communications**

Public speaking is central to the professional world. All Lindenwood University students are required to take one class in verbal communication in order to develop the skills necessary for making presentations. Specific classes can be taken to fulfill this requirement in either the School of Communications or the School of Human Services.

#### COM 11000 - Oral Communication

Oral Communication, an introductory course, is designed to assist the student in improving effectiveness in non-written communications. The course content includes listening, nonverbal communications, topic research, speech development and organization, use of visual aids, which includes PowerPoint, and presentation of formal and non-formal speeches. Emphasis is placed on poise and confidence building.

#### Course Objectives and General Education Goals

- 1. Develop more effective listening skills.
- 2. Learn the theories and techniques of non-written communication in business and society.
- 3. Participate in communication activities, as well as research, organize, and present formal speeches.
- 4. Identify the parts and functions of a speech.
- 5. Apply the basic principles and theories to preparing an organized presentation.
- 6. Deliver effective individual and group presentations.
- 7. Understand and be able to execute various speeches for different situations.
- 8. Gain confidence in communicating with others and performing before an audience.

#### Assessment Procedure

Two different methods are used in assessing the students: Test A and Test B.

#### Test A

The method of testing is a pre-test and post-test comprised of 15 (30%) short answer, 20 (40%) multiple choice, and 15 (30%) true-false questions. These 50 questions appraise the knowledge of speech parts, functions, delivery, plagiarism, citing sources, organization patterns, research topics, types of speeches, and motivated sequence for persuasion. The instructors administer the tests in both fall and spring semesters. The examination is given the first week of the semester and again during the last week of the semester.

	Students	Number Possible	Number Correct	Percent Correct
Summer 09 Pre-test	15	750	420	56%
Summer 09 Post-test	15	750	625	83%
Improvement		2	7%	
Fall 09 Pre-test	111	3108	5550	56%
Fall 09 Post-test	111	4005	5550	72%
Improvement		1	6%	
January 10 Pre-test	18	504	900	56%
January 10 Post-test	18	667	900	74%
Improvement		1	8%	
Spring 10 Pre-test	99	2673	4950	54%
Spring 10 Post-test	99	3366	4950	68%
Improvement		1	4%	

Test B

There are three presentations given in the class. Based on a random sampling from summer '09, students averaged 97% on the first presentation, 95% on the second presentation, and 97% on the third presentation. Students from fall '09 averaged 95% on the first presentation, 95% on the second presentation, and 95% on the third (group) presentation. Students from J-Term '10 averaged 97% on first presentation, 96% on the second presentation, and 98% on the third (group) presentation. Students from spring '10 averaged 96% on the first presentation, 96% on the second presentation, and 97% on the third (group) presentation.

Test B Data=Speeches #1-Demonstrate, #2-Inform, and #3-Persuade (group)

	Speech #1	Speech #2	Speech #3
Summer 09	97%	95%	97%
Fall 09	96%	95%	96%
J-Term 10	97%	96%	98%
Spring 10	96%	96%	97%

#### **Data Analysis**

In test A, the limited test of short answer, true/false, and multiple choice questions, a marked improvement can be seen, of 21%, 16%, 18%, and 14% respectively.

While test B, a more comprehensive test, showed strong scores on the first presentation because of the less difficult general purpose (demonstration) and topic choices, 3-5 minute speech length and no professional dress requirements.

Even with the greater degree of difficulty and expectations given to the second presentation (oral footnotes, semi professional dress, 4-6 minute speech length, and a typed outline or PowerPoint required), scores averaged only slightly lower.

The final (group) presentation sampled a minimal improvement over the first and second presentations. Even though the degree of difficulty and additional expectations (oral footnotes, professional dress, 7-9 minute speech length, and PowerPoint required) increased to an even greater level over the first and second presentations, being able to draw on the strengths of the group accounts for the slightly improved scores.

Minimal change or improvement occurred between the summer, fall, J-Term and spring classes, showing a consistency in material coverage. Students scored slightly higher during summer and January Term due, most likely, to a reduced course load, generally taking only one three-credit class.

Classes with students who had taken a speech class before, as a whole, scored higher. Other variables that should also be considered are the size of the class, international students speaking a second language, and time of day in which the class was offered.

#### Action

Survey questions will be added to the pre- and post-test questions.

A review of the data shows the instructors who are teaching Oral Communication have consistencies in education and material coverage. Instructors will continue to strive to maintain this consistency.

#### SW 10000 - Intercultural Communication

#### **Course Goals**

- 1. Development of an appreciation of how culture and diversity affect communication.
- 2. Increased effectiveness in day-to-day communication focused on the diversity of self and others.
- 3. Improved public speaking skills related to academic and career success.

#### Assessment of Course Objectives

Nine (9) course objectives are identified for this course. Students rate themselves on the first day of class and at the end of the semester as to their knowledge, abilities, and skills for each of the course objectives.

Self-ratings are based on a Likert Scale: 1=No ability; 2=Some ability; 3=Average ability; 4=Above average ability; 5=Exceptional ability

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		08-09 ratings	Change		9-10 ratings	Change
Objective Topic	Pre	Post		Pre	Post	
Physical & verbal communication styles	3.24	4.05	+.81	3.85	4.15	+.30
Interaction with others	3.63	4.28	+.60	4.0	4.30	+.30
Effects of culture on communication	3.47	4.39	+.92	3.87	4.38	+.51
Cultural assumptions separate from facts	3.32	3.93	+.61	3.76	4.23	+.47
Self and others' cultural perspectives	3.41	4.06	+.65	3.84	4.0	+.16
Personal discomfort from intellectual disagreement	3.24	4.02	+.78	3.46	3.84	+.38
Effective day-to-day communication	3.79	4.23	+.44	3.38	4.30	+.92
Organized, expressed thoughts in formal situations	3.34	4.06	+.72	3.92	4.07	+.15
Improved communication skills	3.46	4.23	+.77	3.61	4.17	+.56
Mean Scores	3.43	4.14	+.71	3.74	4.16	+.42

#### **Data Analysis**

In all objectives students self-rated at post-test with a 4.0 or above (with the exception of one category: discomfort from disagreement) out of a possible 5.0, with a mean score of 4.16 indicating that in general, students upon completing this course self assess that they have above average ability in their intercultural communication skills. This outcome achieves the targeted course goals. Where levels of change are lower, it is because students self assessed with higher knowledge during the pre-test. Noteworthy is that students demonstrate growth in all measurable categories.

#### Outcome Evaluation

The faculty of the Social Work Department consistently demonstrates the ability to teach effective Intercultural Communication skills as indicated by students' self assessment and the course content assessment.

#### Course Content Assessment

Since 2005-06, students have completed a 20-item multiple-choice inventory based on content considered throughout the course. Results on a year-to-year comparison:

Academic Year	Pre-test - % Correct	Post-test - % Correct	Change - % Correct of Pre- to Post-Difference
2005-06	26%	64%	+38%
2006-07	34%	62%	+28%
2007-08	27%	51%	+24%
2008-09	46%	74%	+28%
2009-10	45%	61%	+16%
Mean Score	35%	62%	+26%

#### Data Analysis

Students demonstrated an increase in mastery of course content determined through pre-post test mean score of (26%) over the past five years. Even though the change in growth (16%) is lower than previous years, students' pre-test scores are considerably higher than 2005 – 2008, which accounts for the lower % change. Post scores are consistent with previous years and are within acceptable standards.

#### Outcome Evaluation

A new pre-post test was introduced in 2008-2009, which may have influenced data in 2008 – 2010. The content pre- and post-test will be analyzed and items revisited to maximize validity and reliability. All social work faculty teaching this course will meet in August 2010 to discuss consistency with reaching course goals.

### **Analysis of Written and Oral Communications for 2009-10**

The general education goals represented by these classes are further enhanced and reinforced in many of the classes and programs by requirements that students write papers or make inclass presentations. The realization that these general education requirements cross all aspects of the University has led the Assessment Committee to begin to discuss how to assess GE requirements across the whole of the University curriculum.

#### **English Composition**

ENG 11000, while not a GE class, is an important part of improving the University's GE program. In the last three years, a number of changes occurred that appear to make this class more effective for our students: 1) non-native speakers were given their own version (tailored to their needs) of this class to make room for native speakers who need help, 2) a more objective, computerized system is being used to place students into the proper English class, and 3) the use of focused writing assignments to get students to practice and reinforce skills. Initial indications are these changes have been successful.

The new English Department efforts at assessment for ENG 15000 are an interesting idea and should be continued. An effort to include a larger portion of the English faculty and possibly include experienced adjuncts in the process might make this system more workable. The use of a rubric rather than grades as the measure will also allow for more focused measure of the essays. The department might wish to consider focusing on one or two objectives each year when doing assessment.

The use of Criterion instead of a department-based reading is a viable alternative.

The ENG 17000 class assessment tool was revised for the second time this last year, and after it was given a number of problems were determined to exist. The basic idea is that the test has value because it attempts to measure the success of students related to specific objectives. While the tool itself may need redrafting, the basic concept can be of great value to the department.

In order to more accurately reflect the University's concern for English as of 2009-10, a "C" will be considered the lowest passing grade for all 10000-level English classes.

#### **Oral Communications**

COM 11000 has two good methods of evaluation for the speech components of the class. The written objective test is a useful method of evaluating the amount of knowledge gained by students and is providing useful data on what students are learning. Still, more specifics as to areas of strength and weakness would be useful in the report. The evaluation of actual presentations is a good idea but currently has some weaknesses. It is impossible to know if the students are actually learning anything about the process of physically giving presentations. The scores are constantly in the mid-tohigh 90s on all of the presentations, and while this may be perfectly valid because of the increasing difficulty and standards of the presentations in class, it makes it difficult to assess what has been learned. We need to look for methods of scaling, possibly a single rubric, that can be used on certain key criteria that would allow locating the progress made by students. A number of variables are discussed; it would be worth examining these.

SW 10000 also uses two interesting methods of evaluation for the course. The selfevaluation pre- and post-tests are particularly useful in understanding the degree of confidence gained by students in the class. Confidence is a central feature of being able to be a successful presenter of information, and thus this measure is very valuable. The

objective test used to measures whether or not students actually learned what the principles of public presentations are, but more data of about the areas of learning would make this more useful. The central weakness for this class is a lack of a measure of actual implementation of these principles and whether or not the confidence students feel they have is actually present while making presentations.

### **Humanities**

Understanding people and cultures is an important part of success in life in the modern world. Literature, philosophy, and religion each give individuals important insights into aspects of how people, cultures, and societies see themselves and each other. They also give us common areas to act as starting places for discussion and building relationships. The general education humanities requirement is composed of two literature classes and one philosophy or religion class, and it is designed to ensure that students are exposed to not just important ideas and concepts but to the tools necessary to understand, analyze, and discuss them. By better understanding literature, philosophy, and religion, students come to a better understanding of not just the authors and their cultures, but also themselves.

#### **Literature Courses**

All Lindenwood students are required to take two literature courses as part of their GE program. The first class must be at the 20000 level and the second can be at either the 20000 or 30000 level. The number of classes used to meet this requirement is extensive and changes from year-to-year based on specialty classes that are offered. For assessment purposes, we keep track of the 4 largest literature classes.

#### ENG 20100 - World Literature I

#### **Course Goals**

The broader purposes of the course ask students to

- 1. read representative works from both ancient and medieval literature,
- 2. become familiar with the literary traditions, genres, and forms exemplified in the readings,
- 3. consider the critical attitudes that have shaped our responses to these works,
- 4. improve basic reading and reasoning skills such as comprehension, analysis, and synthesis.

#### **Course Objectives**

More specifically, upon completion of English 20100 students should be able to

1. recognize major themes, stylistic features, and literary devices evident in the literature,

- 2. understand and correctly use the vocabulary associated with specific literary genres, movements, and periods,
- 3. identify key attributes of literary genres, movements, and periods and understand how they contribute to the development of the literary canon.

#### Procedure and Rationale

Students were given multiple-choice pre- and post-tests focusing on elements outlined in the above objectives. The assessment tool measures linguistic knowledge, comprehension, application, and analysis. Questions 1, 2, 3, 4, 7, 8, 13, and 14 ask students to apply their knowledge to specific passages of the literature. In these questions, students are not being tested on their knowledge of the passages per se; rather, they are being tested on their abilities to read, comprehend, and analyze passages from representative works. Questions 5, 6, 9, 10, 11, 12, and 15 test students' knowledge of specific literary terms. We do not assume that all sections of the course read the same selections from the anthology; we do, however, assume that all sections cover the major genres from the ancient and Medieval periods. Twelve sections of English 20100 were included in this report for 2009-10, of 18 sections taught. The total number of students who took both the pre- and post-tests was 227 in 09-10.

#### Results

#### Summary of Students' Performance on Pre- and Post-tests

Question	% Correct Pre-test	% Correct Post-test	% Difference
Overall	45.9	63.9	18.1
Average			
Application of Knowledge	50.5	68.75	18.25
Literary Terms	27.57	52.14	24.57

#### Observations

The average pre-test score is a bit lower than last years', though together, there is only slight variation over the last five years (45.9% this year compared with 49.1% last year, 44.2% in 07-08, 45.9% in 06-07, and 42% in 05-06). But the overall improvement is higher than in previous years with this year's average gain of 18.1% on the post-tests. This improvement compares favorably with the total post-test improvement of past years: 15.1% in 08-09 (12 sections), 10.4% in 07-08 (19 sections), 13.8% in 06-07 (11 sections), 10% in 05-06 (5 sections). Students may be receiving better preparation in their ENG 15000-17000 classes in reading comprehension. Though we haven't computed the average grade level of ENG 20100 students, most students seem to continue with their 20000-level literature class shortly after completing their composition requirements. As well, it seems that instructors are more successful in getting across the material that is tested by this document.

This year, student answers improved in all but two questions (numbers 3 and 9). Of those that improved, 12 questions improved by a double-digit percentage and the other question by a single-digit percentage. Last year, the highest percentage of improvement in a single question was a 29%, followed by one 25% improvement compared to this year where one question improved by 42%, followed by others with a 29% and a 28%.

The main anomaly is with question number 3, which saw a -1% change; this is particularly puzzling in comparison to last year's 22% improvement in question 3. The question asks students to identify an exhortation from Hector as illustrating his hubris. The other question that saw a negative change in score is question 9, scoring -4% this year in comparison to -11% last year. This question asks about the role of the chorus in Greek drama.

Last year we speculated that instructors emphasized plot, character, and theme with these readings. Perhaps with a number of instructors emphasizing the epic genre, the dramatic chorus is in the background of class discussion.

This year, the highest improvement, all at 20% or above, occurred with questions 2, 4, 6, 10, 12, and 13. All of these deal with terminology. Similarly, last year the questions with a 20% or above improvement were numbers 2, 3, 10, 11, 12, and 13. Except for the question dealing with the dates of the Middle Ages, these all regard terminology.

Some observations regarding students' post-test responses to individual questions. For question 1, it remains surprising that only 65% recognize an invocation to the Muse, up only 1% from last year. For question 6, one would expect the concept of "tragic flaw" to be familiar to more than 60% of students (57% last year). Though question 10 saw similar improvements in both years (23% this year and 25% last year), we might expect more students to understand the term "catharsis" (39% this year, 42% last year). Perhaps, some instructors may not stress these Aristotelian concepts or terms.

#### **Action Plan**

We will share this report among department faculty, asking especially for discussion of observations in the above paragraph. Next semester, we should gather more sections' results. This probably is a matter of time availability for the grading and tabulating during the final days of May. We will remind instructors that work and learn students can grade the pre-tests, record the correct number for each, and alphabetize the tests for ready comparison with post-tests. If post-tests are given to students before the last week of the semester, work and learn students can likewise grade them and prepare the final tabulations.

#### ENG 20200 - World Literature II

#### **Course Goals**

The broader purposes of the course ask students to

- 1. read representative works from all periods of literary history covered in the course,
- 2. become familiar with the literary traditions, genres, and forms exemplified in the readings,
- 3. consider the critical attitudes that have shaped our responses to these works,
- 4. improve basic reading and reasoning skills such as comprehension, analysis, and synthesis.

#### **Course Objectives**

More specifically, upon completion of English 20200 students should be able to

- 1. recognize major themes, stylistic features, and literary devices evident in the literature,
- 2. understand and correctly use the vocabulary associated with specific literary genres, movements, and periods,
- 3. identify key attributes of literary genres, movements, and periods and understand how they contribute to the development of the literary canon.

#### Procedure and Rationale

This is the eighth year we have assessed ENG 20200. All sections of ENG 20200 read one play by Shakespeare and at least one work from each of the periods of literary history through the modern; all sections study poetry, drama, non-fiction prose, and fiction. Students were given a pre- and post-test focusing on elements outlined in the above objectives. The assessment tool measures linguistic knowledge, comprehension, application, and analysis. It comprises 24 questions: 23 are multiple-choice and 1 (6) is true/false. Seven questions (2, 3, 4, 5, 8, 10, 11) incorporate passages of various lengths from the literature.

#### Results

These results are compiled from a total of 167 students who took both the pre- and the post-tests in a total of 11 sections.

Question	% Correct Pre-test	% Correct Post-test	% Difference
Average	46	61	15

#### Observations

This year's assessment shows an average improvement on all questions of 15% compared to 8% last year and 10% the previous year. This year, students scored higher than last year on 15 questions, lower than last year on 7 questions, and equal to last year on 2 questions.

Students post-test scores for questions 4, 15, 16, 19, 23, and 24 were poor, particularly for question 15, which requires identifying the Middle Ages' influence on the Romantic era. Also weak was students' knowledge of the Romantic period on questions 16. Students could not identify genres well known in particular literary periods for questions 23 and 24 or photography's influence on the Age of Realism as tested in question 19. The scores on question #4 are particularly disappointing, a question about the use of puns in Shakespeare's plays, since all instructors teach a Shakespeare tragedy and were thus exposed to the topic.

In comparison to ENG 20200, ENG 20100 sections have more overlap of reading selections and literary types, making it less difficult to design an assessment tool equally fair to all sections of ENG 20100. In spring 2008, ENG 20200 instructors had an e-mail discussion about the benefits/disadvantages of selecting a few common texts. No agreement was reached for sharing a text besides the agreed-upon Shakespeare play. For the 2009-2010 academic year, ENG 20200 instructors remained unwillingly to agree on two or three common literary works. The more amorphous nature of the available materials for ENG 20200, compared to ENG 20100, makes it difficult to come up with an assessment tool that validly measures the advancement of all sections.

#### Action Plan

- Instructors should emphasize literary periods, historical contexts.
- Possibly throw out #15, which some instructors independently threw out when testing their students.
- Question 11 needs revision because the term "invocation" is an ENG 20100 term; students may not know the answer if their ENG 20200 class did not include a mock epic or epic.
- Question 13 needs a minor change to make it more obvious that the answer is "B." (Change "A" to "Passions are superior to reason.")
- Suggest to the faculty that the post-test be part of the course grade in order to dissuade students from taking the post-test lightly. Instructors, of course, should then check that the material on the test is covered in the class.
- Addressing the changes we might make so that the test is better representative of all sections, we could increase the number of questions on the Shakespeare material.

- The literature specifically referred to on the test includes only English literature, which may mean we should review not only the test but also the reading selections on the syllabi in terms of our objective of covering world literature.
- We might benefit from comparing the ENG 20200 results with the ENG 20100 assessment test results.

### English 23500 - American Literature I

#### **Course Objectives**

Upon completion of English 23500, students should be able to

- identify trends in American literature,
- identify particular authors' styles,
- identify literary periods,
- associate authors with genres,
- identify Puritanism, Deism, Pragmatism, and Transcendentalism as applied to language acts and other forms of expression,
- identify authors of particular works.

#### Procedure and Rationale

This was the seventh year of assessment for ENG 23500 (there was no assessment of ENG 23500 in 2008–09), and it was administered to two sections. Students were given a multiple-choice pre- and post-test covering the factors outlined in the above objectives. All questions measure knowledge.

#### Results

Questions	% Correct (Pre-test)	% Correct (Post-test)	% Change
Average	24	38	14

#### Observations

Student performance on the post-test showed an increase on most questions. All the material had been covered in class. Explanations for weak performances are student absences, failure to buy books, foreign language speakers often not able to understand American dialect, and some failure to retain information beyond guiz and exam time. This test is flawed because the material covered is taught to the test. Also, one section was omitted because the professor gave the students the answers and another forgot to administer the post-test, which did not matter since the test was designed toward one professor's goals, which flawed the test.

#### Action Plan

Before next semester, all professors teaching English 23500 will work on revising the test. Perhaps the catalogue description needs to be revised toward specificity of goals to which the test might be addressed.

#### ENG 23600 - American Literature II

#### Course Objectives

- 1. Identify trends in American Literature.
- 2. Identify particular authors' styles.
- 3. Identify literary periods.
- 4. Associate authors with genres.
- 5. Identify Transcendentalism, Romanticism, Realism, Naturalism, Modernism, and Post-Modernism as applied to language acts and other expressive forms.
- 6. Identify authors of particular works.

#### Procedure and Rationale

This was the seventh year of assessment for ENG 23600 (there was no assessment of ENG 23600 in 2008–09), and it was administered to two sections of the course. Students were given a multiple-choice pre- and post-test covering the factors outlined in the above objections. All questions measure knowledge.

Questions	% Correct (Pre-test)	% Correct (Post-test)	% Change
Average	42	73	31

#### Observations

Student performances on the post-test showed an increase on most questions. All the material had been covered in class. Explanations for weak performances are student absences, failure to buy books, foreign language speaker's inability to understand American dialect, and failure to retain information beyond quiz or exam time. The test is flawed because the material covered is taught to the test. Also, one section was omitted because the professor gave the students the answers before the test was administered. Another flaw is that the test was designed toward one professor's goals.

#### Action Plan

Before next semester, all professors teaching English 23600 will work on revising the test. Perhaps the catalogue description needs to be revised toward specificity of goals to which the test might be addressed.

### Philosophy/Religion

Students are required to take one philosophy or religion class at Lindenwood to fulfill the Humanities portion of their GE requirements. The nature of the Philosophy/Religion requirement allows for a wide range of classes to meet this requirement.

### **Philosophy**

#### **Departmental Goals and Objectives**

- 1. To provide adequate courses for students seeking to meet their general education requirement.
- 2. To develop students' abilities to carefully read and critically analyze material from different perspectives and to form and express cogent judgments concerning philosophical questions and issues.
- 3. To develop an understanding of the philosophical questions and issues that underlies much discussion of contemporary problems facing the world today.
- 4. For students to develop their own world-views and understanding of philosophical questions, to cogently argue for their views, and to understand perspectives and views different from their own.
- 5. To further the University's commitment to "values-centered programs leading to the development of the whole person—an educated, responsible citizen of a global community."

#### Classes Assessed

- PHL 18000 Philosophy: The Big Questions was a trial course for development of an online course. The course involved readings and films of noted philosophers discussing issues related to the readings. The course was assessed for an online course in addition to a normal assessment.
- Also assessed were:
  - o PHL 19000 Philosophy of Human Nature: Mind, Soul, Body.
  - o PHL 21500 Traditional Logic
  - o PHL 21600 Modern Symbolic Logic

#### Narrative of Results

#### PHL 18000 - Philosophy: The Big Questions

Students were not aided by the videos. This was true whether the videos were shown before or after the discussion. A better response from students, in class, in their own evaluations of the course, and on their exams, was found when the videos were not used and the material was just discussed in class. The passive nature of watching the videos also did not help with student attention in class (during the afternoon). The text, which was to supply more than just being a reader of primary works, turned out to be confusing for students as the author of the text often mentioned matters not central to the readings. This course will not be offered again in its present form. The department is working on an online course on the "big questions" to replace it—a course using primary readings, as other PHL courses do.

#### PHL 19000 - Philosophy of Human Nature: Mind, Soul, Body

Last year's trial assessment lead the department to change the order in which the material was presented. The historical ordering seemed to bog students down early in the term. This fall a more thematic approach was used, starting students with more modern views and working backwards. This approach helped students understand the material better. A little more tweaking in the ordering of the material will be done in fall 2010 to see if even more improvement can be made.

#### PHL 21500 - Traditional Logic

A new text was used. The earlier text by Peter Kreeft contained too much irrelevant material that made the book idiosyncratic. A more traditional text was tried and was successful. More arguments, especially longer ones, will be used for greater development and understanding of the material. A workbook on arguments is being developed.

#### PHL 21600 - Modern Symbolic Logic

The text and software worked well with students; those using the software, attending class, doing their homework, asking questions, even if they didn't see the tutors, did very well. With one exception, every student who followed the instructions earned a "B" or an "A" for the course. Students not doing well, with that one exception, failed at one or more of the requirements. Students were told about this during the first several weeks and were reminded of this several other times later in the course.

#### Action Plan for Next Cycle of Assessment

A standardized assessment report has been developed for use in all PHL classes. This report will serve as a summary of the Plan for 2010-2011 adopted in the 2008-2009 Assessment Report.

From the 2008-2009 Assessment Report

Given concerns mentioned in the American Philosophical Association in their statement on Outcomes Assessment (Appendices II and III) and referenced documents (see Appendices IV-IX), we have tentatively adopted the following plan for the 2010-11 year and beyond:

- All courses will be assessed both formally and informally (as will the program).
- All courses will be assessed formally by (1) Exams, Essays, Presentations, etc., and (2) by Course Evaluations.
- All courses will be assessed informally by (1) Regular Faculty Meetings, (2) Reports from Tutors, (3) Classroom Discussion, and (4) Out-of-Class Discussions.

#### Religion

A large number of the religion classes at Lindenwood fulfill the University Philosophy/Religion requirement as a well as the requirement for the major. For this reason, the 20000-levelspecific class information is listed in the program assessment document.

#### Goal

The Religion program offers students the opportunity to study, understand, and appreciate the intellectual traditions, rational foundations, moral guidelines, and philosophical views of life and reality developed by the world's major cultures and religions as part of an integrative liberal arts program. The goal is to provide students with the necessary tools for developing their own religious and theological views in light of critical reflection, in preparation for further academic study, or lifelong learning.

#### Objectives

- 1. To develop the student's ability to do rational, critical thinking and analysis in studying diverse religions.
- 2. To encourage students to respect, preserve, and perpetuate all that is good in each
- 3. To develop an appreciation of diverse world views, moral systems, and religious beliefs.

- 4. To develop a sense of openness to and acceptance of other cultures and traditions different from one's own.
- 5. To bring students to an understanding of the difference between an academic study of religion and religious beliefs and a theological study of a person's own individual faith.
- 6. To expose students to original literature and historic faith texts from cultures and civilizations.
- 7. To encourage students to develop their own beliefs in light of the various traditions and theories and to be able to make practical and theoretical judgments based on those beliefs, as well as understanding the strengths and weaknesses of those beliefs.

## REL 10000 – Introduction to Religion

During the coming year (2010-11), the Religion Department will be reviewing REL 10000 -Introduction to Religion according to the mission statement of the University and the general education goals. At this time it is expected that the following changes will be made in the catalog in the coming year:

- Course evaluations and students' responses will be studied this fall to determine the efficacy of this course for fulfilling the GE requirement. It appears that this course is not of interest to non-majors as a GE course because it is about the methods of the academic study of religion. Preliminary observations suggest that it would make more sense to actually study the religions than to study 'about studying' the religions.
- Thus, both World Religions and the Introduction to Sacred Texts would serve better as introductions to the importance and place of religion in the world for those who will only be taking one course to satisfy the GE requirement.
- That REL 100 should not be required for majors, since the course is an introduction to the academic study of Religion and Majors and Minors receive this information in other courses.

## REL 13000 – Introduction to the World's Sacred Texts

# Objectives

As a result of taking REL 13000, students should be able to

- name some of the scriptures and other sacred texts of the world religions,
- recognize and interpret some key passages from these sacred texts,
- 3. explain the relation of sacred texts to the beliefs and practices of the religions of which they are a part,
- 4. explain something of the variety of understandings of what is meant by "scripture;" distinctive features of scripture; the roles and variety of functions of scriptures in

their respective religions; and problems of authority, canonicity, interpretation, and translation.

#### Assessment Results

In three sections of REL 13000 in the fall semester of 2009 and in one section in the spring semester of 2010, a pre-test was given as the very first activity at the first class of the semester. This pre-test consisted of ten multiple-choice questions testing students' abilities with regard to each of the objectives above. The identical test was administered again as a post-test after the final examination at the end of the course, as the very last activity in the course.

	Number of students who took the test	Average score
Pre-test	100	32.1%
Post-test	96	68.96%

One way to interpret this result is to say that the average student went from an F on the pre-test to a C- on the post-test. That is, the class as a whole failed to get a passing grade on the test before the course, but after taking the course the class achieved a clearly passing grade. On average, students went from having little or no knowledge of the material of the course to having a modest knowledge of it.

At the high end, the indications from the tests are impressive. On the pre-test, there were no scores of 90% or 100%. On the post-test, there were 12 scores of 90% and eight scores of 100%. These data imply that a significant number of students, 20.83%, gained not only a modest knowledge of the course material but an excellent knowledge of it during the semester.

At the low end, 82 students made a score of less than 50% on the pre-test, while only eight students made a score of less than 50% on the post-test. Again, this is an impressive result. Almost all individual students made at least a passing score on the post-test, while most individual students failed the pre-test.

These data support the conclusion that, in these sections of the course, the stated objectives of REL 13000 were attained.

Other conclusions include the observation that certain questions were only rarely answered correctly by any student, namely, the ones concerning the god of fire in early Indian scriptures and concerning the Chinese texts, the I Ching and the Analects. This implies that more emphasis should be placed on these matters the next time the course is taught.

#### Action Plan

During the coming year, the Religion Department will be reviewing the texts and content of REL 13000 - Introduction to the World's Sacred Texts after its first year as a general education course.

- The course will be reviewed for its application for GE and Cross-Cultural requirements.
- The course will be reviewed for its application to the Religion major.
- The course will be reviewed to see if it is strong enough as a standalone class from World Religions or if it is redundant.

# **Specialty classes**

During the coming year, the Religion Department will be reviewing the special topics class History of Christianity, which would be taught in the fall in rotation with Religion in America in the spring. So this should or would be entered into the catalog as REL 20100 in conjunction with REL 20200 - REL in America. The objectives are

- to get it into the catalog this coming year as a regular course in rotation with Religion in America as a regular general education course,
- to provide students with a broader understanding of their cultural and historical religious heritage in the West,
- to add an additional course to the catalog that will serve as a general education course for those students who will only take one Religion course in their college career tried a more interactive approach to the fourth and fifth centuries by having students outline the major arguments and chart them on a usable graph.

# **Analysis of Humanities for 2009-10**

#### Literature

The current testing methods for the ENG 20100 class are useful in that they test skills more than specific knowledge. In ENG 20100, there is significant success in getting across concepts and terms rather than teaching students to read specific works. This is shown in the success in improving student understanding of both application of their knowledge and in the use of literary terms. This understanding will allow students to read and apply their education to new works. But there are still some significant areas of weaknesses that have been identified by the English Department.

For ENG 20100 and ENG 202000, the improvement was good, but the analysis should be broken down into the component concepts (goals) being tested to look for specific areas of weakness or strength. The analysis should include more of how this will influence the conduct of the class or changes the department sees necessary to strengthen the class.

For ENG 23500 and 23600, the data is a start but only a start. More analysis will need to be done on what is being successfully conveyed in class. It should be noted that if an assessment test covers the class objectives professors will, simply by the nature of the class, be teaching to the test, this is not a flaw. Other mistakes, not giving the post-test or giving the answers prior to giving the post test, does create flaws, but working with the good data that was created does allow for the opportunity to get the most information possible out of the data.

An expanded analysis of a writing component in the literature class would be useful, as would a check back on the success of the ENG 10000 level classes. This would have the advantage of being done by the same department with the same standards as in the 10000 level classes.

## Philosophy

The department has been developing a comprehensive assessment system with a standardized class assessment report for implementation during the 2010-11 academic year.

The program is making significant strides in expanding its class and program assessment. Still, there are weaknesses in the department's current assessment system. The report can use more of the data on which the changes that are taking place are based. There also should be a growth in the focus on program assessment and seeing how students who have majored in philosophy have evolved in their time at Lindenwood.

## Religion

In the last three years, the Religion Department has been restructured both in size and the types of classes being offered. The report implies that REL 10000 is redundant and thus unnecessary; will removing it be considered? It appears the test in REL 13000 showed a great deal of success, but matching up the students and studying specific growth and improvement will further efforts to see what was a success and what was not. The analysis of success on individual questions was good and looks to be leading to adjustments in the class.

The Religion Department is implementing a new assessment system in order to more effectively be able to access and analyze the success of its primary GE classes. This system will tie more directly to the department's GE goals.

# **Fine and Performing Arts**

Lindenwood University believes that exposure to the arts allows students to grow in their understanding of the arts as an expression of the human condition and through that knowledge to come to a better understanding not just of the creator, author, and performer, but of themselves. For this reason, Lindenwood students are required to take one class from the School of Fine and Performing Arts, which includes Art, Dance, Music, and Theatre.

# Art

# ART 21000 - Concepts in the Visual Arts and ART 22000 - History of Art

Based on student descriptions of the same two artworks at the beginning and end of the semester, we are able to gauge on a yes/no basis the extent of the students' understanding of the primary course objectives.

Beside the primary course concept listed below is the percentage of students determined to have attained the intended understanding of the concept.

#### Results

	2006	2007	2008	2009	2010
Historical Context	44%	63%	54%	66%	66%
Color	29%	38%	48%	39%	43%
Composition	39%	43%	51%	43%	48%
Content	64%	54%	57%	73%	66%
Material Form	76%	69%	62%	69%	73%

# ART 24000 -Introduction to Ceramics

We rate each student's demonstrated abilities in specified areas on a 1-5 scale based on their final critique. The following percentages represent students who received high ratings of (4-5): the rank of 4 a success:

## Results

	2006	2007	2008	2009	2010
Historical context	50%	50%	54%	48%	54%
Recognition of kitsch	33%	33%	45%	38%	38%
Use of construction techniques	46%	46%	64%	65%	68%
Light, shadow, proportion	25%	33%	64%	65%	48%
Surface preparation	50%	50%	64%	53%	48%
Glaze and slip application	65%	70%	72%	65%	54%

# ART18100 - Intro to Photography

We rate each student's demonstrated abilities in specified areas on a 1-5 scale from the work presented as his/her final outside-of-class assignment. The rating represents the abilities assessed and the percentage of students who received high marks (4-5) for their demonstrated abilities.

## Results

	2006	2007	2008	2009	2010
Printing technique	45%	48%	50%	54%	48%
Print quality	40%	45%	50%	59%	45%
Composition	54%	41%	45%	54%	45%
Focus	61%	63%	70%	66%	70%
Depth of field	41%	51%	50%	49%	48%
Originality	31%	35%	35%	42%	35%
Technical knowledge	33%	30%	40%	54%	45%

# <u>ART18100 - Intro to Photography-Digital Assessment</u>

We rate each student's demonstrated abilities in specified areas on a 1-5 scale from the work presented as his/her final outside-of-class assignment. The following represents the abilities assessed and the percentage of students who received high marks (4-5) for their demonstrated abilities.

#### Results

	2007	2008	2009	2010
Printing technique	30%	40%	56%	53%
Print quality	30%	35%	43%	43%
Composition	32%	50%	43%	65%
Focus	75%	80%	76%	NA*
Depth of field	NA	NA	NA	NA
Originality	27%	40%	43%	48%
Technical knowledge – Photography	31%	30%	56%	43%
Technical knowledge – Adobe Photoshop	68%	75%	65%	68%

<sup>\*</sup>With the technological advancements in image stability on digital cameras, mastery of focus techniques has become irrelevant.

# Art 10000 - Fundamentals of Drawing and Design

We rate each student's demonstrated abilities in specified areas on a 1-5 scale from the work presented as his/her final outside-of-class assignment. The following represents the abilities assessed and the percentage of students who received high marks (4-5) for their demonstrated abilities.

## Results

	2009	2010
Understanding of concepts	56%	74%
Organization of space	74%	74%
Quality of execution	63%	63%
Linear Perspective	56%	65%
Presentation	53%	56%
Creativity/risk-taking	48%	53%
Modeling	63%	74%
Composition	56%	77%
Shading/Value	56%	63%

# Dance

# DAN 10100- Introduction to Dance

This class is for students with no previous experience in dance. This is a beginning movement course in dance techniques and styles including elements of ballet, modern, jazz, tap, and social dances. The course explores and defines dance in diverse context: artistic expression, ritual, play, entertainment, socialization, exercise, cultural

expression, and maintenance of traditions. This course helps students develop body awareness, flexibility, and creativity.

## Results

#### Fall 2009

23 students	Pre-test - %	Final Exam - %	Improvement - %
High Score	16/25 – 64%	24/25 – 96%	32%
Low Score	1/25 – 4%	15/25 – 60%	56%
Average Score	7/25 – 29%	19/25 – 78%	49%

# Spring 2010

24 students	Pre-test - %	Final Exam - %	Improvement - %
High Score	19/25 – 76%	23/25 – 92%	16%
Low Score	3/25 – 12%	4/25 – 16%	1%
Average Score	9/25 – 32%	17/25 – 68%	36%

## Actions for 2010-11

 Restructure current assessment tools with consideration to both the physical academic/intellectual elements of the class.

## DAN 11000 - Dance as an Art

Dance as an Art is an introductory course designed to develop the student's ability to enjoy and analyze dance performance through a consideration of dance style, technique, choreography, and the role of dance in culture. Students demonstrate their competencies through written test, video analyses, and performance critique(s).

## Results

Fall 2009 - 36 students

Entire Class	Pre-test - %	Final Exam - %	Improvement - %
High Score	21/35 – 60%	100/100 – 100%	40%
Low Score	2/35 – 5%	77/100 – 77%	72%
Average Score	16/35 – 17%	80/100 – 80%	63%

Dance Majors	Pre-test - %	Final Exam - %	Improvement - %
High Score	21/35 – 60%	100/100 – 100%	40%
Low Score	5/35 – 14%	94/100 – 94%	80%
Average Score	11/35 – 31%	98/100 – 98%	67%

#### Actions for 2010-11

• Update current assessment tools with consideration to new text/incorporation of additional world dance forms, major vs. non-major, and long-term assessment goals.

# DAN 37100 - Dance in the 21<sup>st</sup> Century

This course is a survey of the purposes, functions, and manifestations of American and World dance forms. The objectives of the course are to expose students to the history and current trends of world dance and to expand students' understanding of the trends and developments, the ability to discuss major dance forms and reforms, and to develop critical thinking and writing skills pertaining to dance.

Students demonstrated their competencies through written tests, video responses, and in-class presentations. A pre-test was given the first week of class. At the end of the semester the pre-test scores were compared with the (comprehensive) final exam scores to determine student's progress.

#### Results

# Spring 2010 - 36 students

Entire Class	Pre-test - %	Final Exam - %	Improvement - %
High Score	17/25 – 68%	40/40 – 100%	32%
Low Score	0/25 – 0%	23/40 – 58%	58%
Average Score	5/25 – 20%	35/40 – 88%	68%

Dance Majors	Pre-test - %	Final Exam - %	Improvement - %
High Score	17/25 – 68%	40/40 – 100%	32%
Low Score	3/25 – 12%	32/40 – 80%	68%
Average Score	11/25 – 44%	38/40 – 96%	52%

## Actions for 2010-2011

• Update current assessment with consideration to the following: new text, major vs. nonmajor, completion of Dance as an Art, individual progress, and long-term assessment goals.

# Music

## MUS 15000 Music in America

## Goals

The goal of MUS 15000 Music in America is to extend and refine the students' ability to analyze and describe music accurately, evaluate music coherently, and relate music meaningfully through examination of the distinctive voices, historical and cultural underpinnings, elements, and the evolutionary track of American music. This ties directly to the University GE goals one, two, and four.

# Objectives

- 1. Given increasingly diverse and sophisticated aural examples, the student will accurately identify the title, composer, and genre or style of American musical masterworks.
- 2. Given increasingly diverse and sophisticated aural and notated examples of American musical masterworks, the student will accurately identify the elements of music.
- The student will identify and describe meaningful relationships between diverse masterworks of American music and art, history, culture, and self.
- 4. The student will construct comprehensive written evaluations of American musical masterworks.

## Method of Assessment

# MUS 15000 Pre-and Post-tests

Semester	Pre -test	Post-test
Fall 2009	29.39	42.89
Spring 2010	27.17	41.34

Decision-Making Period: Summer 2010

Although the results of the post-test demonstrate increased awareness of melody, harmony, tempo, rhythm, dynamics, form, texture/instrumentation, style/genre, historical significance, and musical terminology in the context of American music, this

method of assessment is inconclusive—the method of assessment does not objectively measure the specific course objectives. Accordingly, new pre- and post-tests, including assessment of the general and background knowledge the student will need for the course, will be designed and implemented in the 2010-2011 academic year. The fiveyear target (2014) for this assessment is 90% > 80%.

Action Period: August 2010-May 2011

Design and implement new pre- and post-tests as discussed in the previous section.

# MUS 16500 - Introduction to Music

Intro to Music is a relatively new course that has never been assessed. Since it has proven to be popular among students, it will remain in the catalog. Accordingly, preand post-tests will be designed and implemented in the 2010-11 academic year.

Reporting Period: Begin May 2011, then every May thereafter

The five-year target (2014) for this assessment is 90% > 80%.

Decision-Making Period: Summer 2011

Action Period: August 2011-May 2012

# **Theatre**

These courses serve to educate students to recognize and identify relationships among the forms and techniques of the performing arts and demonstrate an awareness of the historical role played by the arts in shaping and expressing human values at the individual and cultural levels.

## TA 10500 - Fundamentals of Acting

This course serves as a GE elective and satisfies the Fine Arts requirement. As such, this course serves to educate students to recognize and identify relationships among the forms and techniques of the visual and/or performing arts and demonstrate an awareness of the historical role played by the arts in shaping and expressing human values at the individual and cultural levels.

The assessment instrument for TA 10500 is a fill-in-the-blank and short-essay pre-test and post-test covering terminology, concepts, and self-assessment. In the fall semester of 2009, the test was administered to 23 students at the beginning and the end of the semester. In the spring semester, the tests were administered to 48 students.

#### Results

Category	Year	Pre-test	Post-test	Improvement
Terminology	09-10	7%	69%	62%
Theory/ Concept	09-10	5%	64%	59%
Self-Assessment:	09-10	21%	83%	62%
Confidence in Performing a Character				

On the post-test the students were asked which aspect of the class was the most helpful in learning how to develop a character. The results are as follows:

 Lectures 9 62 Exercises/games 69 Performing a Scene

# **Analysis**

The improvement in the objective sections of the pre-test and post-test have increased as can be seen in the data from the 2009-10 academic year. Yearly results will continue to be tracked and compared. As a result of this post-test we will continue to revisit how we reinforce the terminology and the theories associated with acting.

## TA 11100 - Introduction to Technical Theatre I

This course serves as a GE elective and satisfies the fine arts requirement. As such, this course serves to educate students to recognize and identify relationships among the forms and techniques of the visual and/or performing arts and demonstrate an awareness of the historical role played by the arts in shaping and expressing human values at the individual and cultural levels.

The pre-test is designed to allow students to respond to (define, explain, or comment on) the entire range of topics covered in the course. The post-test allows students to elaborate on previous results after having been exposed to saturation in directed readings and section lectures and discussions. The project work is designed for students to participate in regular practical labs with specific criteria designed to stimulate cognitive and visual skills with structural material. An open-notes final is given.

#### Results

N=48	Average score
Pre-test	19%
Post-test	73%
Improvement	54%

## **Analysis**

Students who attended a greater number of lab hours fared better in overall knowledge, although the lab-hour requirement needs revision as the current system isn't really working. Too many lab hours are being required for the student, and they need to be pared down. Also, technical theatre majors do significantly better with the coursework and obviously have more interest in the subject matter.

#### Action Plan

Rethink and retool the course. Pare down material to essential basics. Provide clearer expectations for exams. Change textbook to a simpler, basic text. Emphasize success through a hands-on process. Spend more class time in the shop and use WebCT even more for lecture content. Re-vamp lab hours to include fewer required hours, and focus them on a particular project or production to increase participation. Think of the course as a "positive introduction to tech" geared to the majority, mostly non-tech oriented students, rather than a serious prerequisite/skills-building course, and save that for Technical Theatre II.

# TA 11700 - Introduction to Theatrical Arts

This course satisfies the GE requirement for fine arts. Topics include: theatre etiquette, stages in theatre history, theatrical styles, and theatrical genres. The course consists of lectures, the reading and discussion of plays, and viewing live theatrical performances.

A pre-test is given on the first day of the course, and a post-test is given on the final day of the course. The test consists of 15 fill in the blank questions covering theories and concepts examined in the course.

#### Results

N=91	Average score
Pre-test	8%
Post-test	93%
Improvement	85%

# **Analysis**

The percent of improvement indicates a significant percentage of student success in this course.

#### Action Plan

No action will be taken at this time. We will continue to track the results and effectiveness of this assessment instrument in the future.

# **Analysis of Fine and Performing Arts for 2009-10**

#### Art

The art program has been actively expanding its assessment efforts but does have some areas for improvement. It would help to lay out the course objectives in the assessment report for each class. Are there rubrics for these ratings? Do ART 21000 and ART 22000 have the same objectives? If not, why do they use the same assessment tool? These are two very different topics. Are there any pre-tests to give a comparison to assess students' learning? The program needs to capture how it is "closing the loop," using the results to know how its classes are doing and what changes should be made to improve student learning.

#### Dance

Dance assessment appears to have a number of the pieces in place for a strong assessment program, but the dance classes need to have more clearly defined goals and objectives in order to make determining the applicability and success of the assessment easier and clearer. The assessment then should break down the improvement not just overall, but by various class objectives. Assessment of skills in the GE courses should be developed; since students actually participate in dance, any improvements in skills should be measured. The program needs to work to tighten up the process by showing what is successful and what needs to be changed and how. The program also needs to work at showing the connection between assessment and the changes being made.

# Music

The Music Department's plans to expand GE assessment in spring 2011 are a good next step for the program. The efforts at assessing MUS 15000 are a good start. But how did students do on each of the targeted areas listed in the report? The department has

recognized the need to tie assessment to departmental goals and objectives and will more closely align its efforts beginning in fall 2010.

## Theatre

The theatre program is doing a good job of getting assessment into its classes and is working to connect assessment to course improvement. Still, there are weaknesses. Publishing class goals and objectives is useful for giving focus to the reader. Breaking down assessment analysis into smaller chunks—how they did by objectives or concepts, ideas or skills that the faculty desired the students to attain—would be good for the department to give focus to class improvement. When doing multi-year comparisons, it is necessary to list the results for the years being compared.

# **Civilization/Cross Cultural**

# Civilization

Lindenwood requires all students to take World History and one year of foreign language, or in place of a foreign language, two courses defined as cross cultural. The most important role of World History is in helping students understand how the modern world has been shaped over time by the interaction of events, people, and ideas. Through the foreign language/cross cultural requirement, students are exposed to non-American cultures. Together the purpose of these courses is to expand the view that Lindenwood students have of the world beyond the borders of the United States. These courses lay the groundwork for students to understand other cultures and the events that have led them to their current views and beliefs. In doing so, these courses will make them better citizens, professionals, and business people by allowing them to better interact with and understand people from around the world.

## HIS 10000 - World History since 1500

Assessment of HIS 10000 continues to build on previous assessment activities. World History remains one of the core courses within the Lindenwood University General Education Program. As such, the aim is to provide a global context for academic education. The course builds a base level of cultural literacy, founded on familiarity with salient aspects of the human past and on the ability to understand connections across time and space. Comparisons of pre-test and post-test scores provide information regarding the value of our World History course as a communicator of these basic facts and ideas.

In order to judge our effectiveness in providing this core educational foundation, the History Department uses an assessment test to evaluate historical geography, historical movements, historical causation, events, and people. These categories are designed to build an understanding not only of historical chronology and causation, but also of key individuals, ideas, and events. Each faculty member teaching HIS 10000 uses identical assessment questions. Summary results reflect a cross-segment of sections, faculty, and semester results.

#### Results

The HIS 10000 pre- and post-test consists of 25 multiple-choice and matching questions covering 8 categories of world history and 15 map questions covering 7 categories of modern world geography. The results for four sections (four instructors, 85 students) of HIS 10000 in the spring semester 2010 are as follows:

History Categories	Pre-test (% correct)	Post-test (% correct)	Change
Chronology	48	60	12
Imperialism	30	41	12
1500-1700	38	52	13
1700-1900	28	38	10
1900-present	43	58	15
Non-western	27	44	17
Philosophies/Religion	37	55	18
Islam and the Mid-East	26	37	11

Geographical Categories	Pre-test (% correct)	Post-test (% correct)	Change
Countries	13	23	10
Cities	26	33	7
Asia	11	17	6
Middle East	18	34	16
Africa	9	14	5
Europe	10	19	9
Latin America	18	26	8

	Pre-test (% correct)	Post-test (% correct)	Change
Student Average	12	17	5
Student % Correct	30%	43%	13%

During the spring semester 2010, 18 sections of HIS 10000 were taught by four full-time faculty members and six adjunct instructors. The department was forced to limit the computation of results to four sections due to lack of time to tally the results from so many students at the beginning and the end of the semester. We look forward to the use of electronic tallying via Scantron for the fall semester 2010. This will enable us to get results to instructors rapidly and allow the department to more effectively oversee the teaching and results of this course. As well, we should be able to analyze results of individual questions and various groups of questions across all instructors.

## **Analysis**

The assessment results varied no more than 4% from the average on both the pre-tests and the post-tests in each of the HIS 10000 sections evaluated. Given the variety of valid approaches taken by different instructors to the same body of material, these results suggest consistency in instruction and student learning.

# Foreign Language/Cross Cultural

Lindenwood students are required to either take two consecutive semesters of a foreign language (and they must be language not literature) or two courses designated as cross cultural by the University. Cross cultural is defined as courses that do not deal with subjects and/or topics within the United States, groups within the United States, or American culture. These areas include, but are not limited to, literature, history, religion, and anthropology. These classes are generally covered within the assessment report of the program or other GE requirements, and so only the foreign language classes are covered here.

# **Foreign Languages**

Lindenwood offers courses in four Languages that meet the cross cultural/foreign language requirement: Chinese, French, German, and Spanish.

These foreign language classes below are not specifically a part of any major, but the French and Spanish classes can serve as pre-requisites for students without previous language experience.

#### **Mandarin Chinese**

## Objectives

Students will become familiar with

- 1. Chinese grammar
- 2. Chinese characters
- 3. Chinese culture and history

#### Assessment Method

Assessment tests were given at the beginning of fall semester 2009 and at the end of spring semester 2010. The assessment was based on 15 students taking both pre-test and post-test. The pre-test showed 0% correct answers to questions to be covered in

the course. When compared to the same items imbedded in the final exam, the number of correct answers increased to 86%. The details are as follows:

	Pre-test	Post-test
90 or above	0	9
80 -89	0	2
70 -79	0	2
60 -69	0	2
Below 60	15	0

In the 2009-2010 academic year, the students, who had neither learned any Mandarin Chinese previously nor knew much about the language before taking it, learned a lot. Not only did they learn the history of the language, they also grasped the spirit of the language. By the end of this program, they could communicate with each other on basic daily life topics and knew how to write in Chinese characters. They had also learned much about basic knowledge of Chinese phonetics and Chinese grammar. They gained an understanding of the Chinese cultural background knowledge related to the topics covered and got a general idea of Chinese culture.

## French

# FLF 10100 - Elementary French I

#### Assessment tools

- a pre-test given at the beginning of each semester containing items imbedded in the final exam,
- analysis of scores on comprehensive final exam
- analysis of final exam average compared to chapter test averages
- an end-of-semester evaluation of the course

## Results

Assessment was based on 69 students taking the pre-test and post-test. The pre-test showed 2.1% correct answers to questions over grammar to be covered in the course. When compared to the same items imbedded in the final exam, the number of correct answers increased to 76%. Scores on the final broke down in the following fashion according to percentiles: 90 or above: 10; 80 -89: 15; 70 -79: 31; 60 -69: 8; below 60: 5.

While the comprehensive final is deemed useful and necessary as a tool to push students to review the whole semester's material, it is also clear that performance on such a massive exam at such a stressful time of the semester is often not a reflection of the students' true grasp of the material.

Students' overall satisfaction with the course was very high, based on the end-ofsemester evaluations.

#### FLF 10200 - Elementary French II

#### Assessment tools

- a pre-test given at the beginning of each semester containing items imbedded in the final exam
- analysis of scores on comprehensive final exam
- analysis of final exam average compared to chapter test averages
- an end-of-semester evaluation of the course

#### Results

Assessment was based on 55 students having taken the pre- and post-test. The pre-test showed 1.6% correct answers to questions over grammar to be covered in the course. When compared to the same items imbedded in the final exam, the number of correct answers increased to 71%. Scores on the final broke down in the following fashion according to percentiles: 90 or above: 11; 80 -89: 16; 70 -79 11; 60 -69: 7; below 60: 10.

As is the case with FLF 10100, the comprehensive final in FLF 10200 is deemed useful and necessary as a tool to push students to review the whole semester's material. However, it is also clear that performance on such a massive exam at such a stressful time of the semester is often not a reflection of the students' true grasp of the material. Verb charts were again incorporated into the initial and final reviews. This seems to have improved student performance on the final exam verb sections.

Student evaluations of the course are not yet available, but will later serve to gauge students' overall satisfaction with the course.

#### General Comments Pertaining to the 10000 Level

Listening comprehension is measured at regular intervals with each chapter test and is monitored in a less structured way through class participation. Students are also required to do listening exercises using their online lab manual following every class lesson. The deadlines for these exercises force the students to do listening work at regular intervals throughout the semester. This year we went back to the paper version of the Workbook with listening exercises. The new edition has the written and listening exercises together for each lesson and student can do the listening part online without having to have a Quia account or other coded access. This was very convenient for the

students, and there were zero complaints. After having tried both workbook and lab exercises online, then paper workbook and listening online, this system has proved the most successful.

Oral proficiency is monitored exclusively through class participation. The instructor monitors and makes suggestions to students having trouble progressing orally. While students working in the physical language lab, where there are no sound barriers, complained of not wanting to speak out loud in response to the lab exercises, the new system of using an online lab manual provides the students the opportunity to practice pronunciation at home.

Reading comprehension is monitored through homework assignments and chapter tests.

Writing skills are tested with each chapter test and through compositions given as homework.

## FLF 20100 - Intermediate French I

Assessment is based on the following tools:

- a pre-test given at the beginning of each semester containing items imbedded in the final exam;
- analysis of scores on comprehensive final exam;
- end of semester evaluations of the course.

## Results

Assessment was based on 14 students having taken the pre- and post-test. The pre-test showed 6.1% correct answers to questions over grammar to be covered in the course. When compared to the same items imbedded in the final exam, the number of correct answers increased to 88%. This was a particularly strong group! Scores on the final broke down in the following fashion according to percentiles: 90 or above: 9; 80 -89: 3; 70 -79: 1; 60 -69: 1; below 60: 0.

The students and instructor enjoyed using the book, A Votre tour! The workbook exercises leave something to be desired and are often replaced with professorgenerated and text-based ones. However, the book provides excellent grammar review and exercises to build skills in all five areas.

For the first time, all students earned at least a B for the course. This is seen as a sign that the course kept most of the students interested and engaged, as there are usually some lower grades at this level, though few Ds and Fs, since by the time they have

decided to continue to the 20000 level, they have a level of commitment to learning the language.

Students' overall satisfaction with the course was very high based on the end-ofsemester evaluations.

## FLF 20200 - Intermediate French II

Assessment is based on the following tools:

- a pre-test given at the beginning of each semester containing items imbedded in the final exam,
- analysis of scores on comprehensive final exam,
- end-of-semester evaluations of the course.

#### Results

Assessment was based on 11 students having taken the pre- and post-test. The pre-test showed 3.1% correct answers to questions over grammar to be covered in the course. When compared to the same items imbedded in the final exam, the number of correct answers increased to 84%. Scores on the final broke down in the following fashion according to percentiles: 90 or above: 4; 80 -89: 3; 70 -79: 1; 60 -69: 3; below 60: 0.

Both teacher and students continued to enjoy working with the textbook A votre tour!

This semester, because there was an abundance of native French speakers working for the department and available, students in FLF 20200 were asked to work with a French conversation partner. For some, this proved to be very successful in helping them develop speaking skills. For others—generally the weaker students—the conversation partner served more as a private tutor. In both cases, it seems to have been a worthwhile endeavor and the program will continue next year (for FLF 20200, not FLF 20100) if possible.

Student evaluations of the course are not yet available but will later serve to gauge students' overall satisfaction with the course.

## General Comments Pertaining to the 20000 Level

Listening comprehension is measured at regular intervals with each chapter test and is monitored in a less structured way through class participation. Students are also required to do listening exercises in the Language Lab using their workbook. Student feedback indicates that while they don't enjoy doing these listening exercises and find them rather difficult, the level of dissatisfaction was not high.

Oral proficiency is monitored through class participation and the performance of oral dialogues. The instructor monitors and makes suggestions to students having trouble progressing orally.

The FLF 20200 students participated in the conversation partner program, and the native speakers provided feedback to the professor as to the students' listening comprehension and oral proficiency.

Reading comprehension is monitored through homework assignments and chapter tests. A votre tour! provides excellent reading passages and exercises based on them.

#### German

## FLG 10100/10200 – Elementary German

#### Results

	Assessment Type	Scores	Fall 2009	Spring 2010
FLG 10100	Pre-test: August 2009	60% or higher	17%	
FLG 10200	Post-test: May 2010	60% or higher		73%

Inflections continue to present a challenge to students. As noted last spring, however, the pace of the course cannot be slowed any further. Requiring more time in the language lab seems to have improved students' understanding, though. The need to learn and retain vocabulary also remains a foreign concept (particularly the vocabulary from previous chapters). Perhaps adding vocabulary items from earlier chapters to quizzes will reinforce the need to review.

## FLG20100/20200 – Intermediate German

#### Results

	Assessment Type	Scores	Fall 2009	Spring 2010
FLG 20100	Pre-test: August 2009	60% or higher	20%	
FLG 20200	Post-test: May 2010	60% or higher		80%

Because this class was quite small, the results of the assessment may not be typical. However, the increased emphasis upon grammar review might have affected the outcome as well. Next year's enrollment is larger, however, and should provide a solid base for comparison.

# **Spanish**

## FLS 10100/10200 - Elementary Spanish

#### Results

In order to arrive at a more complete record of student progress, this year the department decided to give separate pre- and post-tests for FLS 10100 and FLS 10200, rather than only at the beginning of FLS 10100 and the end of FLS 10200.

The results for both classes are shown below

FLS 10100/10200	Pre-test Scores	Post-test Scores
FLS 10001 60% or higher	0%	73%
FLS 10200 60% or higher	0%	58%

The pre-test consisted of items having to do with the elementary vocabulary and grammar points to be covered in this two-semester course. All of the students who took both tests scored under 60% on the initial test. The results on these same items embedded as a post-test in the final exam at the end of the semester show that 73% of the students scored over 60% in FLS 10100 versus 58% in FLS 10200. Lower scores in FLS 10200 might be explained by the increase in new grammar items included in the second semester. Whereas the first semester is mostly devoted to vocabulary, pronunciation and a few grammar sections, the second semester introduces more vocabulary plus seven new verb tenses. This proves to be very challenging to students. In order to improve overall student performance, next semester we will be adopting a new enhanced edition that includes additional practice in a technological format that students are familiar with and that can be used at home.

Although all the "new" students in the spring semester had had the equivalent of FLS 10100 (or more), their pre-knowledge was still under the 60% level. A source of difficulty for an appreciable number of students each year continues to be having allowed a time-lapse of a year or more between taking the first semester and the second semester of this two-semester course. We have made a concerted effort to point out the dangers of such discontinuity to faculty advisors in all fields and will continue to do so in the hopes of improving student performance in this way, as well.

In the interest of more intensive in-class practice, we have limited the number of students in each section to 25. In response to increased demand, we have added sections so that more students can participate in the elementary program. In the fall 2009 semester, we also added a second FLS 10100 section, to accommodate those who would like to begin the cycle in mid-year. We will continue to offer two FLS 10200 sections in the fall 2010 and two FLS 10100 sections in the spring 2011.

There are always a number of students of those entering at the FLS 10200 level who are dismayed to find that their previous preparation elsewhere (high school, community college) was inadequate to providing a basis for handling the second-semester material; these students often drop the course, either to begin with FLS 10100 the following year or, more commonly, to opt for other cross-cultural courses. Aside from that, there are always several students at both levels who withdraw in order to take courses that appear to require less sustained effort compared to that necessary to mastering a foreign language.

Among those who complete the two semesters, the fundamental problem continues to be one of the students' attention to detail; the faculty will continue to employ instructional strategies to encourage more responsible student behavior with regard to accuracy in the learning of linguistic elements and rules. Our textbook has provided a variety of types of support material in the package, which has helped in our effort to accomplish this. This support material is further refined in the new edition for fall 2010, which uses the internet more intensively. Those students who have actually taken advantage of such tools have been enthusiastic about them and have shown improved mastery as a result; nevertheless, too many still do not want to invest the necessary time and effort.

As stated in previous reports, a change in the method of testing, limiting the need for independent knowledge of forms and rules in favor of a strictly multiple-choice "recognition" format for the test items, could lead to better numerical results; students tend to do better on the sections (i.e. vocabulary, reading comprehension) that use this format. However, while this method might indeed improve the statistical results for the students, it does not reflect the degree of independent ability in language usage that is the true goal of the foreign-language instruction.

Oral Proficiency continues to be demonstrated through various types of individual or group presentations in class, depending on the level and topic involved. Charts listing standard evaluation aspects, such as comprehensibility, language control, vocabulary use, and pronunciation, are used to determine the level of performance.

## FLS 20100/20200 - Intermediate Spanish

Of the 63 FLS 20100 students, 58 students took both the pre- and post-test for the fall and spring sections, and of the 43 FLS 20200 students, 32 students took both the preand post-test for the spring section.

## FLS20100 - Intermediate Spanish I

On the pre-test, none of the students scored 60% or higher (average of 24%), while on the post-test, 46 students did. The average score on the final was 76%. Scores on the final broke down in the following fashion according to percentiles: 90 or above: 10; 80 or above: 20; 70 or above: 33; 60 or above: 45; below 60: 13.

# FLS20200 - Intermediate Spanish II

On the pre-test none of the students scored 60% or higher (average of 16%), while on the post-test 24 students did. The average score on the final was 73%. Scores on the final broke down in the following fashion according to percentiles: 90 or above: 1; 80 or above: 9; 70 or above: 16; 60 or above: 24; below 60: 8.

## General Comments Pertaining to the Spanish 20000 Level

Student's overall satisfaction with the two 20000-level courses continues to be high. Based on a survey of the students' perception of their knowledge of the subject matter (given at the beginning and at the end of each semester) and their overall understanding of Spanish grammar and culture, their oral proficiency has greatly improved. Many students mentioned that they enjoyed the textbook (grammar well explained), the cultural readings (cultural awareness), different cultural presentations by the professor (on Spain, Panama, and Guatemala in FLS20100, and Ecuador and Honduras in FLS 20200), the format of the tests (one per chapter; focused), the daily oral group activities, and several group mini-plays (even though these, students claim, are very demanding). The semester course evaluations of FLS 20100 and FLS 20200 focused on the performance and approachability of the instructor. Every fall, in FLS 20100, a couple of students (usually freshmen out of high school) are not happy with the "Spanish-only" policy, as they think it is too difficult. Some have also mentioned that the workbook and laboratory work were boring and not effective, although these are essential for their development of listening, reading, and writing skills. It is important to note that the grades for the final exam in FLS 20200 keep getting better compared to previous years, which could be attributed to the extra time spent doing additional exercises (provided by the professor) on the subjunctive tenses and relative pronouns, which are a large part of the grammar in that course.

Listening comprehension is measured at regular intervals with several chapter tests and is monitored in a less structured way through class participation (interaction with instructor and also with pairs during oral presentations, as well as during group discussions).

Oral proficiency is measured through oral examinations, oral presentations, and daily oral class participation. Students are evaluated on fluency, use of appropriate grammatical structures, proper vocabulary, and pronunciation. Suggestions are given to students who have trouble progressing orally.

Reading comprehension is monitored through chapter and cultural readings, chapter exams, and homework assignments.

Writing skills are tested with each test, and through compositions and presentations.

As a result of these findings, the instructors will continue to adapt to the needs of students, expand their individual understanding of the subject matter, hopefully make them stronger Spanish speakers, as well as help them appreciate cultures from other countries. Also important to note is that FLS 20100 and FLS 20200 will now be offered both in the fall and in the spring, with a different instructor teaching them. Both instructors will continue to use the textbook package (textbook, reading selections, and workbook with both written and laboratory sections), which focuses on grammar reinforcement (particularly the subjunctive tenses), useful intermediate-level vocabulary (adding more vocabulary sections in chapter tests), cultural diversity, and interesting readings. In addition, the instructors will continue to spend more time on class and group oral activities, give more cultural presentations, and make more use of video materials in both FLS 20100 and FLS 20200 to reinforce the listening and oral skills of the students. The instructors hope that these measures will continue to lead to an increase in the final percentile of individual students and the overall group. The instructors also plans on continuing the pre- and post-assessment of FLS 20100 and FLS 20200 as individual courses with the hope of allowing a larger number of students to participate, and therefore to be able better measure the students' response to the changes. The information gathered will provide relevant and specific data for assessing each individual course and help the instructors analyze the results to make the necessary adjustments in the future.

## **Cross Cultural**

## Languages

The French and Spanish courses discussed above are also the basic courses on which students can build a major or minor as well and, therefore, cannot be considered as something entirely separate from those courses leading to a field of further study. The more advanced language courses at the 300 level can also be used to meet the GE requirement. In the case of native speakers of French or Spanish, the language-related courses in their own language cannot be used to meet the cross cultural/foreignlanguage option. Nevertheless, they can use other upper-division courses, such as the culture/civilization or literature courses, to meet the cross cultural requirement and serve as a general education element.

## Eastern Religion - Cross Cultural Classes

After a three year trial period, the department has decided to reduce the number of Eastern Religion classes because

- There is limited interest among the students.
- We are moving away from the teaching style that precludes study of the substantive parts of each of the traditions of the Eastern religions.
- There is a desire to focus more on the strengths and interests of the faculty and the majority of Lindenwood students.
- We will continue to offer courses as warranted, but with specialists in each of the Eastern traditions.

This approach will be re-evaluated after a year under the new emphasis and with access to course evaluations of those who will be teaching Eastern Religion courses as adjuncts.

## SOC 31800 - Race and Ethnicity

For some years the department has been trying to experiment with different modes of assessment for our SOC 31800 Race and Ethnicity course. This year we decided to use a one-sample T-test to measure the difference in significance between the score on the first exam and the score of one of the essay questions on the final exam.

The major goal of the Race and Ethnicity course is to familiarize students with the major research findings on race and ethnic relations by social scientists in different regions of the world. Students should become more aware of the racial and ethnic diversity, and the problems associated with this diversity in different societies. Students will also become more familiar with the history and conditions of various racial and ethnic groups in U.S. society. In addition, students will also learn some basic concepts that are used to analyze racial and ethnic relations by social scientists. These concepts will enable students to develop critical-thinking skills that will allow them to better comprehend racial and ethnic relations everywhere. Also, as students examine the patterns of racial and ethnic prejudice and discrimination, they ought to become more sensitive to other groups in living in an increasingly multicultural society.

# Results

We know from numerous experimental studies that what students learn from the research by anthropologists and sociologists on race and ethnicity as found in Raymond Scupin's Race and Ethnicity: An Anthropological Focus on the United States and the World Chapter 2 (MacEachern), Chapter 3 and 4 (Lieberman) is somewhat counterintuitive compared to their folk models of race and ethnicity. For example, when students read and hear lectures about how anthropologists consider 'race' as not being a scientifically valid concept for classifying humanity throughout the world, this conflicts with their intuitive and folk-based understandings of race. We have found that many students have a difficult time incorporating these anthropological and sociological concepts of race and ethnicity. Therefore, we wanted to measure how students were learning and incorporating these scientific findings in the course.

The first multiple choice exam on the basic concepts of race and ethnicity was worth 25 points and then a take-home essay question covering the same material which was part of the final exam was also worth 25 points. By using a one sample T-test for fall 2009 and spring 2010, we discovered that there was a significant increase in knowledge of the basic concepts of race and ethnicity by the final exam.

The results of a one-sample T-test conducted comparing pre- and post-test scores obtained on our assessment tool for SOC 31800 in the fall semester of 2009, revealed a statistically significant difference in scores in the predicted direction, t(34) = 20.49, p < .01. In other words, the final exam scores (mean = 20.49, standard deviation = 4.865) exceeded the first exam scores (mean = 16.26, standard deviation = 4.154). Likewise, the results from the one-sample t-test conducted comparing first exam and final exam scores on our assessment tool for SOC 31800 in the spring semester of 2010 revealed a statistically significant difference in the predicted direction, t(30) = 22.55, p < .01. In other words, the final exam scores (mean = 22.55, standard deviation = 2.779) exceeded the first exam scores (mean = 16.81, standard deviation 3.167).

## Fall 2009 One Sample T-test Results

	N	Mean	р	Std. Deviation	Std. Error Mean
Exam 1	35	16.26	<.01	4.154	.702
Final exam Q1	35	20.49	<.01	4.865	.822

	Test Value = 0					
	95% Confidence Interval					
			Sig. (2-	Mean	the Difference	
	t	df	tailed)	Difference	Lower Upper	
Exam 1	23.153	34	.000	16.257	14.83	17.68
Final exam Q1	24.911	34	.000	20.486	18.81	22.16

# Spring 2010 One Sample T-test Results

	N	Mean	Р	Std. Deviation	Std. Error Mean
Exam 1	31	16.81	<.01	3.167	.569
Final exam Q1	31	22.55	<.01	2.779	.499

## **One-Sample Test**

	Test Value = 0						
	95% Confidence Interva						
			Sig. (2-	Mean	of the Difference		
	t	df	tailed)	Difference	Lower Upper		
Exam 1	29.550	30	.000	16.806	15.64	17.97	
Final exam Q1	45.177	30	.000	22.548	21.53	23.57	

The one-sample t-test analysis demonstrated that in all cases, the final exam scores on the concepts of race and ethnicity exceeded the first exam scores using this conventional criterion. Thus, we can comfortably conclude that the students in SOC 31800 have definitely improved in their basic understanding of the goals and objectives of the SOC 31800 course.

#### Action Plan

We discovered that with our assessment tool the one-sample t-tests gives us a much more precise measurement for assessing what our students are learning in the GE courses, such as SOC 31800 Race and Ethnicity. We will retain this assessment tool to measure the outcomes of our GE classes. Although, we did plan to do a one sample ttest based on an item analysis of our questions, we decided against this. We did not think that this would demonstrate any significant difference in our findings. We are discovering that although the t-test gives us a precise measurement of how the students have improved in their knowledge, we do not think the t-test is sufficient for assessing our student learning.

This next academic year we have plans to assess a variety of our sociology and anthropology courses.

Theatre

## TA 33500 - Modern Drama

A pre-test and a post-test were administered in Modern Drama. The pre-test was given on the first day of class and the post-test was administered the day of the final exam. The fundamental purpose of the test is to gauge the students' basic knowledge regarding some of the most important works in dramatic literature from the Golden Age of Greece to the contemporary era at the beginning of the term and their knowledge at the end of the semester. In the pre-test, students gave correct answers for 12.7% of the questions. On the post-test, they answered 79.2% of the questions correctly.

This is a survey class, and we sometimes move at a fairly rapid pace; there is a great deal of reading to do. Once again, redundancies are built into the class in order to reinforce information already covered and demonstrate how it relates to the new material. Students read plays, write a one-page synopsis of the play including a personal critique, listen to lectures, watch films or informational videos, and participate in class discussions. Graduate students read additional plays and are required to keep a journal relative to all the plays they read in the class. The undergraduate and graduate students seem to benefit from this approach. However, it is the goal of the department to enhance learning and retention and thereby improve the percentage of correct answers on the post-test. Students are assisting in this endeavor by suggesting how the test or the assessment methodology can be improved. One suggestion from students is to place more emphasis on the story of each play and the message of same (where appropriate) rather than on the name of the playwright. The professor will continue to solicit the playwrights' names on the pre- and post-tests but will add a section that addresses the story and "moral" or message inherent in the piece. It seems that the students are interested in telling what they know and don't hesitate to share with me what they think is important. The department believes it is also important that the students in class be able to identify the style and genre of the play and link it to the culture and cultural events in context and will, therefore, confer with students to determine how this goal can be accomplished within the framework of the class. Finally, at the request of the graduate students, the professor will set aside time twice a month for separate "graduate seminars" where the post-baccalaureate students and the professor meet outside of the combined class to discuss the material in a more indepth manner.

# **Analysis of Civilization/Cross-Cultural for 2009-10**

## World History

The History Department's assessment of HIS 10000 has been severely limited by the movement from full-time faculty to primarily adjuncts as the primary instructors. Considering the large number of sections (more than 35 a year with 35 students each), (1225 students) the use of a Scantron for the pre- and post-assessment testing does appear to be a necessity. The department needs to look to define success in HIS 10000. There need to be expanded discussion of what the data is leading the department to do in order to improve the areas that have the weaker scores.

# Languages

#### Chinese

The pre- and post-tests are a good start, but for analysis, they should be broken down into the components they are testing, such as grammar, characters, and history. Is speaking one of the objectives? If so, we should look for a way to measure success in that area as well. Were there any weaknesses? If so, what will be done in the future? Considering that the Chinese professors are on loan from another university, what will be done to insure continuity of instruction?

#### French

The French program does a great deal of work in class assessment and is constantly in a state of change as it attempts to improve the program. There are some issues to expand upon. Class goals and objectives need to be tied to achievement measured through assessment (tests or other methods). Noting how students did on grammar was very useful, but what about other objectives? Can we do a quick comparison of early and late writing assignments? Can we measure early and late oral proficiency? Can a measurement tool be created to look into listening comprehension? We should look to see if there is some way to measure the impact of the conversations partners programs. A section of the report needs to be added to discuss actions, if any, that will be take in the following year to adjust or adapt the class.

#### German

German classes are assessed and changes are made based on the information gained, but there are some issues to expand upon. Class goals and objectives need to be tied to achievement measured through assessment (test or other

methods). How are students doing in regards to specific objectives? Can we do a quick comparison of early and late writing assignments? Can we measure early and late oral proficiency? A section of the report needs to be added to discuss actions, if any, that will be taken in the following year to adjust or adapt the class.

## Spanish

The Spanish program is doing a very good job of assessment, analysis, and course improvement. What is lacking is a method of capturing the information from which, and the methods by which, many of these decisions are being made. The program is using quantitative, qualitative, as well as anecdotal information. There are some issues to expand upon. Class goals and objectives need to be tied to achievement measured through assessment (test or other methods). Can we do a quick comparison of early and late writing assignments? Can we measure early and late oral proficiency? Breaking out the changes being made into a separate section would make it easier to follow the use of assessment by the program.

## Sociology

The basic concept of assessment is sound, and the use of T-tests creates a statistical basis to work from. The weakness is in when the first test is administered. If it is after a series of lectures then the final test is measuring changes from a point within the class to the end, and not from the beginning. It might be worthwhile to look for a tool that would allow for measuring from the first day to the last. There are also other questions. Are there any adjustments or changes necessary based on the data being collected? Are the differing definitions of race and ethnicity the only major goal of the class? What other areas of growth is the department seeing from its students?

# **American History and Government**

Lindenwood students are required to take one U.S. history or U.S. government class. The requirement is designed to give American students a greater understanding of the events and institutions that forged and reflect our national identity as well as how we function as a society and a country. For foreign students, it exposes them to the events that forged our national identity and information about how our government, which is a major international player, works.

# History

## History 105 – U.S. History to the Civil War

# Course goals

At the end of the course the successful student will be able to

- 1. understand historical themes and interpretive concepts,
- 2. gain an understanding of the trends, eras, traditions, and issues in American history on today's life,
- 3. know the basic geography of the United States and the significance of its basic features,
- 4. give students the ability to place specific events into a broader interpretive view of the American historical experience,
- 5. acquire a working knowledge of chronological periods in American history and major events within them,
- 6. improve skills in reading, writing, and assimilating material,
- 7. expand knowledge to build abilities to comprehend, synthesize, and analyze information.

#### Results

The assessment test is designed to assess knowledge gained during the semester. It is a 40-question test with 10 multiple-choice, 15 matching, and 15 geography questions (broken into states, cities, and events). The test is given at the beginning and the end of the semester.

	S2009	S2010
Pre-test Average	35.4%	49.2%
Post-test Average	51.8%	71.7%
Average Improvement	16.4%	22.5%

Of the students who took the pre-test and post-test, the improvement went from 4% getting a passing grade to 54% (defined as 60% correct on the exam). In spring 2009 the figures were 7% to 35%.

# Results by topic area

	Pre-test		Post	-test	Improv	Improvement	
	S2009	S2010	S2009	S2010	S2009	S2010	
1600-1800	32.1%	34.6%	44.4%	47.9%	12.3%	13.3%	
1800-1850	28.4%	25.4%	45.1%	44%	16.7%	18.6%	
1850-1865	32.3%	37.5%	49.8%	56.3%	17.6%	18.8%	
Native	62.9%	63.5%	74.2%	75.0%	11.3%	11.5%	
Americans							
Slavery	44.5%	44.2%	61.8%	70.0%	17.3%	25.8%	
People	34.4%	37.4%	50.7%	53.9%	16.3%	16.6%	
Events	46.8%	37.8%	62.9%	72.2%	16.1%	34.4%	
Economics	25.1%	24%	42.3%	40.3%	17.2%	16.3%	
Map Locations	39.2%	38.4%	49.7%	48.1%	10.5%	9.7%	

# **Analysis**

- Except in the category of events, results show no significant variations from spring
- Overall scores show some improvement from spring 2009.
- This is the third year with this version of the HIS 10500 test. Revisions need to be made to change the length of the test and more accurately reflect the concerns of the department for what students leave the class knowing.
- The professors for this course and HIS 10600 rotate each semester, and the number of adjunct instructors varies, thus making comparisons only effective over multiple years when allowing for the comparison of semesters when the same instructors are doing the course.

## Action Plan

- While these scores are encouraging, more focus will be given to the place and role of geography.
- We hope to be able to use electronic grading for these tests starting in fall 2010 semester. This will enable us to get results to instructors rapidly and allow the department to more effectively oversee the teaching and results of this course. As well, we should be able to analyze results of individual questions and various groups of questions across all instructors.

# History 106 -US History Civil War to the Present

At the end of the course, the successful student will be able to

- 1. understand historical theme and interpretive concepts,
- 2. gain an understanding of the trends, eras, traditions, and issues in American history on today's life,
- 3. know the basic geography of the United States and the significance of its basic features,
- 4. give students the ability to place specific events into a broader interpretive view of the American historical experience,
- 5. acquire a working knowledge of chronological periods in American history and major events within them,
- 6. improve skills in reading, writing, and assimilating material,
- 7. expand knowledge to build abilities to comprehend, synthesize, and analyze information.

#### **Test Results**

	Spring 2009	Spring 2010
Pre-test average	53.1 %	53.8%
Post-test average	69.2%	77.8%
Average improvement	16.1%	24%

Of the students who took the pre- and post-tests, the improvement went from 41% getting a passing grade to 95%. In spring 2009, the figures were 43% to 75%.

# Results by topic area

	Pre-test %		Post-test %		Improvement	
	2009	2010	2009	2010	2009	2010
Race and Gender	33%	33%	52%	59%	19%	27%
Economics	42%	41%	66%	71%	24%	30%
Wars	58%	48%	61%	70%	3%	23%
US and the World	46%	37%	53%	62%	7%	24%
Events	54%	52%	68%	76%	14%	24%
People	38%	36%	60%	63%	22%	27%
Map Locations	83%	82%	91%	91%	8%	9%

# **Analysis**

- Except in map locations, improvements are significant, but only comparison with future years will indicate if this is the beginning of a secular trend or only an anomalous saltation.
- Results in geography suggest that the test needs to be revised so that initial scores are not so high.

#### Action

 We hope to be able to use electronic grading for these tests starting in the fall 2010 semester. This will enable us to get results to instructors rapidly and allow the department to more effectively oversee the teaching and results of this course. As well, we should be able to analyze results of individual questions and various groups of questions across all instructors.

### Government

# HIS 15500 –U.S. Government History and Politics

#### Course Goals

At the end of the course, the successful student will have

- gained an understanding of the structure of the U.S. government;
- gained an understanding of the major positions and offices in the U.S. government their functions and history;
- gained an understanding of historical themes and interpretive concepts in the development of the U.S. government;
- gained the ability to place specific events into a broader interpretive view of the American political experience;
- acquired a working knowledge of chronological periods in American political history and major events within them;
- improved his/her skills in reading, writing, and assimilating material;
- expanded his/her ability to comprehend, synthesize, and analyze information.

## Data

Two measures were used for this class in 2009-10. The first was a 25-question multiplechoice assessment test covering all of the major areas that topics discussed in the class. The second was a series of Likert scale questions, which in the pre-test asked how much they knew, and on the post-test how much they had learned. The scale was 1-7 with 4 being neutral.

The objective portion (using only the scores from students who took both the pre- and post-tests) of the tests saw major improvements by the students. There was a major change in the nature of the test between 2008-09 and 2009-10, and thus the 2008-09 data is not listed here as it would not be an accurate comparison.

	Students Who Took Both Pre- and Post-	Passed	Percentage
	Fall 2009		
Pre-test	49	0	5.7%
Post-test	49	16	32.9%
	Spring 2010		
Pre-test	47	4	8.5%
Post-test	47	25	53.2%

Results from students who took both the pre- and post-test:

- In the fall semester, 44 out of 49 (90%) of the students improved.
- In the spring semester, 44 out of 47 (93.6%) of the students improved.

## Broken down by topics

		200	9-10		2008	3-09*
	Pre-	Post-	Improvement	Pre-	Post-	Improvement
	test %	test %		test %	test %	
Congress	26.6	49.3	22.7	42.2	67.2	25.0
Presidency	41.0	67.7	26.7	39.4	56.3	16.9
Courts	38.8	56.0	17.2	42.8	46.8	4.0
Constitution	41.6	60.8	19.2	36.6	63.6	27.1
Bill of Rights	42.3	61.7	19.4	35.0	61.6	26.6
Interest groups/Media	18.8	27.6	8.8	83.8	88.9	5.1
Elections	26.0	52.0	26.0	43.4	44.4	1.0
History of Government	41.5	60.6	19.1	37.7	67.3	29.6

o The 2008-09 test was considerably shorter and less comprehensive, thus the two years coved are not a perfect match, but the topics were similar and can thus be used for a general comparison.

Weaknesses were shown in the area of the Congress, elections, and interest groups/media. It is worth noting that in spite of the weaknesses, the only area that did not see double digit improvement was interest groups and the media.

The second measure was a series of Likert scale questions, on which students were asked how much they know about the various topics covered in the class. In the fall semester, there were 10 questions.

- 1. How much do you know about electing the president and Congress?
- 2. How much do you know about the roles and powers of the president?
- 3. How much do you know about the roles and powers of Congress?
- 4. How much do you know about the history of the U.S. Government, its bodies, and traditions?
- 5. How much do you know about the system for selecting and approving members of the federal courts, especially the Supreme Court?
- 6. How much do you know about the roles and powers of the federal courts, especially the Supreme Court?
- 7. How much do you know about the origins and logic of the constitution?
- 8. How much do you understand the Constitution of the United States?
- 9. How much do you understand the Bill or Rights and the amendments to the Constitution?
- 10. How much do you know about interest groups and the media as their roles in politics and society?

#### Fall 2009

At the beginning, the students generally assessed themselves as having average (4) or below-average knowledge, except in areas of the elections, the role of the president, and the Bill of Rights.

Pre-test:	How	much d	o vou	know?	1-7
Pre-lest.	пом	IIIucii u	o you	KIIOW!	Τ.

	1	2	3	4	5	6	7	8	9	10	Avg	Pre-test
Average	4.39	4.33	3.61	3.80	3.22	3.31	3.67	3.96	4.18	3.41	3.79	32.57%
Mean	5.00	4.00	4.00	4.00	3.00	3.00	4.00	4.00	4.00	3.00	3.90	32.69%
Std Dev	1.27	1.20	1.30	1.34	1.26	1.39	1.33	1.22	1.29	1.57	0.98	14.09%
Avg Dev	1.01	0.96	1.04	1.09	1.00	1.14	1.08	0.91	0.99	1.36	0.76	10.56%

On the post-test, students saw themselves as having slightly above-average knowledge of all of the topics covered, and in all areas, the improvement was at least 1 full point.

Post-test: How much did you learn? 1-7

			- 1									
	1	2	3	4	5	6	7	8	9	10	Avg	Post- test
Average	5.45	5.51	5.02	5.06	5.14	5.02	5.33	5.18	5.22	5.16	5.21	53.61%
Mean	6.00	6.00	5.00	5.00	5.00	5.00	6.00	5.00	5.00	5.00	5.30	51.92%
Std Dev	1.00	0.89	1.13	1.20	1.12	1.07	1.14	1.13	1.18	1.07	0.83	13.37%
Avg Dev	0.79	0.68	0.92	0.89	0.94	0.76	0.93	0.86	0.94	0.85	0.65	10.67%

# Spring 2010

At the beginning, the students generally assessed themselves as having average (4) or below-average knowledge, except in areas of the elections, the role of the president, the constitution, and the Bill of Rights.

Pre-test: How much do you know? 1-7

	1	2	3	4	5	6	7	8	9	10	Avg
Average	4.33	4.62	3.73	3.93	3.40	3.47	3.89	4.22	4.11	3.80	3.95
Mean	4.00	5.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00
Std Dev	1.28	1.09	1.40	1.40	1.36	1.31	1.50	1.18	1.35	1.42	1.03
Avg Dev	1.05	0.86	1.10	1.07	1.11	1.01	1.24	0.92	1.10	1.13	0.82

As in the fall semester, on the post-test students saw themselves as having slightly above-average knowledge of all of the topics covered, and in all areas the improvement was at least 1 full point.

Post-test: How much did you learn? 1-7

	1	2	3	4	5	6	7	8	9	10	Avg
Average	5.40	5.67	5.29	5.02	4.93	5.00	5.27	5.47	5.56	5.24	5.28
Mean	5.00	6.00	5.00	5.00	5.00	5.00	5.00	6.00	6.00	5.00	5.30
Std Dev	0.99	0.98	1.16	0.97	1.23	1.24	1.14	1.20	1.16	1.15	0.89
Avg Dev	0.81	0.77	0.92	0.65	1.01	0.98	0.92	0.97	0.96	0.96	0.68

## **Analysis**

The greatest weaknesses, as shown by both the objective testing and the Likert scores, were in the areas of the courts. There will be a renewed emphasis on the courts this year and greater efforts to ensure it equal time with the other branches of government.

There will also be an expanded effort in those areas not directly involved in the structure of government, such as interest groups and the media, neither of which were effectively covered by the assessment instruments.

The number of questions was too small to give a strong overview of the class success in meeting its objectives. The test will be lengthened, and additional questions will be added regarding the media and elections for 2010-11.

# **Analysis of American History/Government for 2009-10**

#### History

The History Department has been active in the creation and use of assessment for improvement of the program and classes. The GE history classes are placing a greater emphasis on geography in response to concerns perceived from previous assessments tools. Still, GE history classes need to have work done on them to create more clearly definable objectives for their classes that can be more effectively measured by either qualitative or quantitative methods.

#### Government

The test did show some weaknesses in the class. The Likert scale was useful in gaining a greater understanding of what the students see as the class' strengths and weaknesses. The objective part was also useful, but it showed a need for revision as well. It appears not all of the class objectives are being assessed. Either the class objectives should be revised, or a method of assessing these objectives needs to be developed.

# **Social Sciences**

At Lindenwood social science is the application of science to human behavior and societies. Social sciences seek to explain the events of human behavior in ways that are replicable and to use those replications to make useful predictions. This is done through observation of phenomena and/or through experimentation that simulates those phenomena under controlled conditions.

Through their methods, social scientists seek to minimize the chance that data interpretation is biased by the researcher's hopes/expectations; conclusions and predictions are based on empirical evidence. Scientific theories are always open to being proven false if new (disconfirming) evidence is presented. Social scientists seek to describe/measure human characteristics and interactions empirically, and to produce models for decision-making based on those observations/measurements.

Lindenwood students are required to take courses in two different areas of social sciences, including anthropology, criminology, economics, psychology, and sociology. Each of these fields offers students a different way to view human interactions in the modern world.

# **Anthropology**

The sociology and anthropology program aims to have its students attain three major goals. All of these goals are interrelated and are an integral aspect of all courses in the program. All of these goals coincide with the mission statement of Lindenwood University for producing a fully educated person with a liberal arts background and a global perspective.

#### ANT 11200 - Cultural Anthropology

#### Course Goals

- 1. Students will become familiar with the anthropological perspective. They need to understand how anthropology has both a scientific and humanistic orientation. This holistic anthropological perspective will enable them to perceive their own personal situation in the context of social (broadly defined as demographic, ecological, economic, political, and cultural) forces that are beyond their own psyche, circle of friends, parents, and local concerns. In other words, these students will begin thinking about research findings that do not just confirm their personal, subjective reality, but will become more objective and evaluate research findings in a scientific manner.
- 2. Students will develop a global and cross-cultural perspective. They will develop a beginning understanding of social and cultural conditions around the world and an

- understanding of why those social and cultural conditions are different from those of their own society. Simultaneously, they will develop the ability to perceive the basic similarities that exist from one society to another and to appreciate how humans are similar irrespective of cultural differences.
- 3. Students will enhance their critical thinking and analytical skills. Critical thinking involves classifying, assessing, interpreting, and evaluating information in the form of hypotheses and theories into higher order thought processes. Abstracting and evaluating competing theories and hypotheses, by relying on critical abilities in assessing data, is extremely important in the field of anthropology.

## **Course Objectives**

#### Students will

- 1. demonstrate knowledge of how anthropologists attempt to explain human behavior and institutions through their research within the four major subfields,
- 2. demonstrate knowledge of the basic components of language,
- 3. demonstrate how language does and does not influence culture,
- 4. demonstrate knowledge of the basic concepts of culture and society as used by anthropologists,
- 5. demonstrate a knowledge of the concept of enculturation as it relates to the nurture-nature controversy in anthropology,
- 6. demonstrate knowledge and recognize the importance of both ethnocentrism and cultural relativism as understood within anthropology,
- 7. recognize the significance of social stratification and how it varies from one society to another,
- 8. demonstrate knowledge of how kinship and family influences pre-industrial and industrial societies,
- 9. recognize the importance of nationalism and its influence in industrial societies,
- 10. recognize the significance of globalization and its effect on the environment, economy, social life, politics, and religion in various societies throughout the world,
- 11. recognize how anthropologists apply their knowledge to solving various types of environmental, economic, social, medical, and ethical problems throughout the world.

#### Results

This academic year, we did not do an assessment for our two sections of ANT 11200 for the fall semester 2009 and the spring semester 2010. We did not do so because the course was taught by a first-year adjunct instructor. After reviewing the syllabus of the adjunct, we did not think that this would be a legitimate time to do an assessment. We do recognize this as an insufficiency in our assessment for our GE courses in cultural anthropology for this academic year. However, this next academic year we will have a

new full-time anthropologist, and we will definitely have an assessment of all of our anthropology courses.

#### Action Plan for 2010-2011

In the past, we discovered that with our assessment tool the paired T-tests gave us a much more precise measurement for assessing what our students are learning in the Cultural Anthropology courses. We will retain this assessment tool to accurately measure the outcomes of our GE program. Last year, we thought that we were going to do a much more precise analysis and do a T-test based on an item analysis of our questions on the pre- and post-tests. Yet we decided that this was not going to demonstrate any significant results in our findings. Therefore, we decided against this effort. However, we believe that the paired T-test assessment is not sufficient for determining whether students are learning the material in Cultural Anthropology. We have students do prepared essays on two midterms and the final exam. We believe that this is a vital aspect of our goal for writing across the curriculum. We are going to try to develop a method to see whether we can formally implement an assessment of that week-to-week assignment. In addition, in the near future we are going to develop assessments for a variety of courses in our anthropology program.

# **Criminal Justice**

#### CJ 10100 – Criminology

#### Objectives

#### Student will

- 1. acquire, retain, and demonstrate a basic understanding of the scientific study of crime, both as a social and an individual phenomenon including its origin and causes and the methods used to gather information relevant to questions about criminal behavior, including the theories that attempt to explain past, present, and future criminal behaviors (included in those theories are Choice Theory, Trait Theory, Social Structure Theory, Social Process Theories, Critical Criminology, and Developmental Theories);
- 2. be empowered to critically evaluate the research and findings covered in the course, as well as in other places, such as the news media;
- 3. analyze the similarities and differences among the various theoretical schools in the field of criminology, and demonstrate a grasp of them;
- 4. demonstrate an awareness of how the general principles of criminology can be applied to everyday life.

#### Method of Assessment

The Criminal Justice Department has used an assessment instrument designed to measure the degree of student learning in the pertinent areas. The instrument consists of a fifty-question test. There are twenty-five true/false questions and twenty-five multiple-choice questions. All questions were prepared using the required textbook for the course, Siegel, Larry J., (2008). Criminology: The Core, Third Edition. California: Thompson Wadsworth. The pre-test is administered during the first or second class meeting, and the post-test is typically administered at the end of the semester.

#### Results

The test was administered in 11 sections throughout the year. Analyses of the results show that all classes demonstrated an improvement in knowledge. The average improvement for all courses was 12.66%. The average mean score for the pre-test was 28.9 (based on 50 questions), and the average mean score on the post-test was 32.17.

Criminology, CJ 10100, is a course which touches upon all aspects of the Criminal Justice System. Focusing our assessment efforts on this single class is not without some shortcomings. For instance, many of the students in Criminology, CJ 10100, are not, and will not become, Criminal Justice majors. The course is a general education course and does not have any pre-requisites in order to enroll.

While last year's assessment report noted that the document was being revised, and it was going to be implemented in the fall of 2009, the document was never produced, and the old assessment exam was administered. The faculty of Criminal Justice recently met and discussed the implementation of a new pre/post-test for Criminology. The new exam will be administered to all Criminology students beginning in fall 2010.

#### Action Plan for 2010 - 2011

- With input from the Criminal Justice faculty, a professor has been assigned the task of building a new assessment instrument for CJ 10100, Criminology.
- A new assessment instrument will be in place and administered to each student in each section of CJ 10100 beginning in August 2010.

# **Psychology**

## PSY 10000 - Principles of Psychology

## Objectives

PSY 10000, Principles of Psychology, is the department's primary general education class. The course objectives for every section (as taken from the 2009-2010 syllabi) are to

- 1. Demonstrate a basic understanding of the scientific method and how it is used to gather information relevant to questions about behavior. With this understanding, the student will be empowered to critically evaluate the research and findings covered in the course as well as in other places, such as the news media.
- Summarize key psychological concepts in areas such as perception, learning, motivation, development, physiological bases for behavior, problem-solving, psychopathology, and social psychology.
- 3. Describe differences among the various theoretical schools in the field of psychology.
- 4. Demonstrate an awareness of how the general principles of psychology can be applied to everyday life.

#### Methods of Assessment Used

The methods of assessment vary by instructor. Generally speaking, instructors use a combination of objective tests, essay tests, learning journals, and papers to assess student learning in this course.

In addition to objective tests and learning journals, in the Honors section of PSY 10000 in the fall of 2009, a 15-page research paper was assigned to be completed using APA style and submitted to Turnitin.com. This assignment required students to read current articles published in peer-reviewed journals on a topic of their choice. A reference librarian came to the class and gave a presentation about how to best use the library resources for the paper.

Data from student course evaluations can serve as an indication of what students believe they have learned from a particular class. Thanks to the faculty portal, we now have easy access to this summarized data. Responses to several questions that address ethics, critical thinking, and skills development will be presented (See Appendices A and B for related departmental goals).

#### Results

Research paper. These research papers served as an artifact of the students' ability to meet several goals, including demonstrating information literacy, avoiding plagiarism, developing communication skills such as writing technical papers using APA style, and in some cases, self-exploration. Every student in the Honors section was able to complete this difficult task competently.

Course evaluations. Course evaluations from PSY 10000 sections (Tables 1 and 2) taught by the full-time faculty suggested that the students understood the course requirements and objectives, believed the tests and assignments were relevant to the course material, believed they had added to their knowledge in a significant way, were required to use critical thinking, developed skills and abilities, and were influenced ethically/morally/spiritually as a result of taking the class.

#### Combined PSY 10000 Course Evaluation Data from fall 2009

N=194	Fully Agree	Moderately Agree	Moderately Disagree	Fully Disagree	No Opinion
The course syllabus and policies were clear	146	39	4	3	2
The goals and objectives of the course were clear	141	42	8	2	1
The tests, quizzes, and assignments reflected the course material	139	45	7	1	2
This course added to my knowledge in a significant manner	122	56	8	5	3
This course required me to use critical thinking	105	61	7	5	4
This course enhanced my skills/abilities/professional development	105	69	10	6	4

This course influenced my	93	51	19	6	25
ethical, moral, or spiritual					
development					

## Combined PSY 10000 Course Evaluation Data from spring 2010

N=145	Fully Agree	Moderately Agree	Moderately Disagree	Fully Disagree	No Opinion
The course syllabus and policies were clear	106	30	2	2	5
The goals and objectives of the course were clear	111	21	6	2	5
The tests, quizzes, and assignments reflected the course material	104	31	3	2	5
This course added to my knowledge in a significant manner	102	29	6	4	4
This course required me to use critical thinking	96	33	8	3	5
This course enhanced my skills/abilities/ professional development	96	35	8	3	3
This course influenced my ethical, moral, or spiritual development	86	32	8	5	14

## Lessons Learned and Action Plan

Beginning next year, we hope to develop a more coordinated approach to assessment for PSY 10000, perhaps to include pre- and post-tests to demonstrate that learning occurred as a direct result of instruction. Course evaluations across all sections, including those taught by adjunct instructors, will be examined. We will also attempt to more closely align our syllabus objectives with our new general education goals. Other methods of assessment may be considered in the future.

# **Social Work**

SW 24000 - Human Diversity and Social Justice

#### Goals

- Becoming familiar with historical, personal, and societal strategies to combat discrimination, oppression, economic deprivation, and the promotion of social and economic justice within the United States.
- Acquiring knowledge about human diversity including the areas of age, class, color, disability, ethnicity, family structure, gender, marital status, national origin, race, religion, sex, and sexual orientation.
- Understanding concepts of social justice, covering the areas of distributive justice, human and civil rights, and the global interconnections of oppression.

# Assessment of Course Objectives

Students rated their current ability on a 5 point scale: 1 = No ability, 2 = Some ability, 3 = Average ability, 4 = Above average ability, 5 = Expert.

	age ability, 4 - Above average ability, 5 - Exp	C. C.				
		Post-	Post-	Post-	Post-	Post-
		test	test	test	test	test
		2006	2007	2008	2009	2010
1)	Knowledge about populations at risk	3.47	3.55	3.54	3.69	3.94
2)	Awareness and knowledge of factors that	3.42	3.57	3.73	4.03	3.94
	contribute to and constitute being at risk					
3)	Knowledge about how group membership	3.37	3.53	3.62	3.92	4.42
	includes access to resources					
4)	Awareness and knowledge of social and	3.58	3.82	3.73	3.93	3.89
	economic justice					
5)	Understanding of distributive justice, human	3.47	3.61	3.58	3.81	4.17
	and civil rights and global interconnections of					
	oppression					
6)	Awareness of strategies to combat	3.37	3.78	3.85	3.85	3.89
	discrimination, oppression and economic					
	deprivation					
7)	Knowledge regarding advocacy for	3.16	3.53	3.23	3.66	3.94
	nondiscriminatory social and economic					
	systems					
8)	Knowledge on reciprocal relationships	3.37	3.77	3.62	3.88	3.72
	between human behavior and social					
	environments					
9)	Awareness of theories and knowledge of a	3.37	3.59	3.38	3.52	3.49
	range of social systems and interactions					
	between and among them					
10)	Awareness of how social systems promote or	3.95	3.70	3.58	3.79	3.80
	defer maintaining or achieving health and well-					
	being					
11)	Awareness and skills used to understand major	3.43	3.54	3.08	3.76	3.72
	policies					
Ove	erall Mean Score	3.44	3.64	3.54	3.80	3.90

# Data Analysis

Students during the past five years consistently assessed their knowledge and values of human diversity and social justice positively, with this year indicating above-average abilities (3.90). Below is the data for pre- and post-test self-assessment on the same variables.

Students rated their current ability on a 5 point scale: 1 = No ability, 2 = Some ability, 3 = Average ability, 4 = Above average ability, 5 = Expert.

J		Pre-test 2009-10	Post-test 2009-10	Differential
1)	Knowledge about populations at risk	2.89	3.94	+1.05
2)	Awareness and knowledge of factors that contribute to and constitute being at risk	2.78	3.94	+1.16
3)	Knowledge about how group membership includes access to resources	2.67	4.42	+1.75
4)	Awareness and knowledge of social and economic justice	3.03	3.89	+86
5)	Understanding of distributive justice, human and civil rights and global interconnections of oppression	2.64	4.17	+1.53
6)	Awareness of strategies to combat discrimination, oppression and economic deprivation	2.96	3.89	+.93
7)	Knowledge regarding advocacy for nondiscriminatory social and economic systems	2.67	3.94	+1.27
8)	Knowledge on reciprocal relationships between human behavior and social environments	2.89	3.72	+.89
9)	Awareness of theories and knowledge of a range of social systems and interactions between and among them	2.78	3.49	+.71
10)	Awareness of how social systems promote or defer maintaining or achieving health and well-being	3.0	3.80	+.80
11)	Awareness and skills used to understand major policies	2.78	3.72	+.94
Ove	rall Mean Score	2.82	3.90	+1.08

## Data Analysis

Data indicate that students continue to self-assess their knowledge of diversity and social justice with average ability going into the course and a significant increase (+1.08) above average post-course.

#### Outcome Evaluation

Data attest to the social work faculty's effectiveness in teaching critical thinking skills to both social work and general education students for grasping the basic principles of respect for diversity and understanding of social justice.

#### Course Content Assessment

Since 2005-06, students have completed a 20-item multiple-choice inventory based on content considered throughout the course. Results on a year-to-year comparison, representing the % of items correct, are as follows:

	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10	Grand Mean
Pre-test	26%	25%	30%	42%	44%	33.4%
Post-test	64%	49%	58%	58%	59%	57.6%
Change—% correct pre- to post-tests	+38%	+24%	+28%	+16%	+15%	+24.2%

#### Data Analysis

Data indicate that students have consistently demonstrated a significant positive change in content knowledge, which points to the effectiveness of the faculty in teaching GE classes.

#### Outcome Evaluation

The primary text for this course has been replaced, as it contained dated information. The pre/post-test content examination has been rewritten, as students have suggested some format changes in the test. Individual items will be analyzed with the goal to improve the pre/post-test's reliability and validity. The goal has been met/exceeded during previous four years. Social Work Department faculty will continue to keep this course current and relevant, as it is a key component of liberal arts education, teaching respect for diversity, and sensitivity for social justice and critical thinking skills.

## SW 28000 - Human Behavior in the Social Environment

#### Goals

- acquiring knowledge about the lifespan from conception to death—the ages and stages of the life course,
- utilizing theories of development in bio-psycho-social-cultural assessments
- understanding systems that significantly affect human behavior—the family, groups, organizations, and the community.

# **Assessment of Course Objectives**

Eight course objectives were evaluated for this course. Students rate themselves on the first day of class and at the end of the semester as to their knowledge/abilities/skills for each of these course objectives.

Self-ratings are based on a Likert Scale: 1 = No ability 2 = Some ability 3 = Average Ability 4 = Above average ability 5 = Exceptional ability

	Objective	Pre- test 2006- 07	Post- test 2006- 07	Pre- test 2007- 08	Post- test 2007- 08	Pre- test 2008- 09	Post- test 2008- 09	Pre- test 2009- 10	Post- test 2009- 10
1.	Populations-at-risk and the factors that contribute to and constitute being at risk	3.03	3.61	2.87	3.57	3.2	3.96	3.29	3.92
2.	How group membership includes access to resources	2.82	3.92	2.37	3.77	2.75	3.93	3.35	3.94
3.	Reciprocal relationships between human behavior and social environments	2.94	3.89	2.59	3.79	3.11	4.04	3.33	4.22
4.	Empirical theories and knowledge about the interaction between and among systems	2.42	3.53	2.37	3.36	2.52	4.0	3.39	3.89
5.	Theories and knowledge of biological, sociological, cultural, psychological, and	2.79	3.97	2.84	3.64	2.74	4.46	3.41	4.17

	spiritual development across the life span								
6.	Criteria for professional interpretation of data presented for assessment of atrisk populations	2.36	3.47	1.94	3.36	2.69	3.92	3.24	3.89
7.	Theories and knowledge of a range of social systems	2.33	3.55	2.59	3.50	2.83	4.22	3.12	3.94
8.	Ways social systems promote or deter maintaining or achieving health and well-being	2.94	3.53	2.74	3.71	3.29	4.21	3.27	3.72
Ov	erall Mean Scores	2.70	3.68	2.53	3.59	2.89	4.09	3.26	3.96
1	erall Change b/w e-Post Tests		+.98		+1.06		+1.02		+.70

## **Data Analysis**

The Data consistently indicates that the students' perceive themselves as gaining knowledge while finding that their values also shift as the result of this course. The overall mean change in pre/post-test scores during the previous four years has been +.94. Students also assess themselves as having above average abilities (3.96) in most categories.

#### **Outcome Evaluation**

This GE course teaches basic lifespan development theories that are applicable to human service professions. Data indicate that students perceive this course to be valuable for their careers.

#### **Course Content Assessment**

To quantify this course's effectiveness in achieving course objectives, two measurements have been utilized. Beginning in academic year (2006-07), a pre-test consisting of 25 multiple-choice questions was administered to enrollees on the first day of the course, and the post-test was administered as the final exam. Results were per the following of percent correct responses:

<sup>\*</sup> No data gathered this year

#### Data Analysis

Recent post-test scores (percentage of correct responses) reflect a consistent significant differential increase during recent years (+27%). These scores demonstrate a tremendous increase in knowledge regarding lifespan theories. These data indicate that students, in their self assessment, value learning human lifespan theories and understand how these theories inform their future professional practice.

NOTE: This year's data cannot be located.

# Sociology

#### SOC 10200 - Basic Concepts of Sociology

#### Course Goals

- 1. First, we would like students to develop and become familiar with a sociological perspective. In other words, instead of thinking about society from their own personal vantage point, they need to have an understanding of the external social conditions that influence human behavior and communities. This sociological perspective will enable them to perceive their own personal situation in the context of social (broadly defined as demographic, ecological, economic, political, and cultural) forces that are beyond their own psyche, circle of friends, parents, and local concerns. In other words, these students will begin thinking about research findings that do not just confirm their personal, subjective reality and will become more objective and evaluate research findings in a scientific manner.
- 2. Second, we would like our students to develop a global and cross-cultural perspective. They ought to have an understanding of social conditions around the world and an understanding of why those social conditions are different from those of their own society. Simultaneously, we would like them to perceive the basic similarities that exist from one society to another and to appreciate how alike humanity is irrespective of cultural differences.
- 3. Third, we would like our students to enhance their critical thinking and analytical skills. Critical thinking involves classifying, assessing, interpreting, and evaluating information in the form of hypotheses and theories into higher order thought processes. Abstracting and evaluating competing theories and hypotheses by relying on critical abilities in assessing data is extremely important in the field of sociology and anthropology.

## Course Objectives

- 1. Students will demonstrate knowledge of how sociologists attempt to explain human behavior and institutions.
- 2. Students will demonstrate knowledge of the basic concepts of culture and society as used by social scientists.
- 3. Students will demonstrate a knowledge of the concept of socialization as it relates to the nurture/nature controversy in the social sciences.
- 4. Students will demonstrate knowledge of the differences between race and ethnicity, sex and gender, and other distinctions between biological and sociological categories.
- 5. Students will demonstrate knowledge of the major racial, ethnic, economic, and cultural groups that make up the contemporary United States, as well as some of the changes among and between these groups.

#### Assessment Techniques

As we indicated four years ago, we were going to continue to implement an assessment technique for our Basic Concepts of Sociology course. We wanted to measure the competencies of our students through a pre-test and post-test. These competencies are a blend of Benjamin Bloom's Taxonomy of Cognitive Processes combined with Howard Gardner's Multiple Intelligences Expressive Modalities of Learning. Bloom's six cognitive operations - knowledge, comprehension, application, analysis, synthesis, and evaluation, and Gardner's Verbal-Linguistic expressive modality were used to develop our course goals and objectives. Again with the assistance of the Psychology program, we developed a much more precise technique to assess our students based on paired ttests, which are used to compare between two scores usually taken before and after "treatment" by the same individuals. In this case, the "treatment" is having taken the relevant course. We had the students add their names and student I.D. numbers to the pre-test and post-test exams, which were identical to one another. The pre-test exam was given on the first day of the class, and the post-test was given to them as part of the final exam with identical questions.

We expected that our post-test scores would be significantly greater statistically than the pre-test scores. By convention, "statistical significance" is defined as p < .01, which means that the observed difference between pre- and post-test scores would occur by chance less than 1% of the time. Put more positively, we can be 99% confident, so-tospeak, that the difference in scores between the pre-test and post-test that we see are "real" (i.e., due to our teaching).

In all cases, our post-scores exceeded pre-scores using this conventional criterion. So, we can comfortably conclude that our students have improved after our SOC 10200 course.

#### Results

The results of a one-sample t-test conducted comparing pre- and post-test scores obtained on our assessment tool for SOC 10200 in the fall semester of 2009 revealed a statistically significant difference in scores in the predicted direction, t(82) = 13.69, p < .01. In other words, the post-test scores (mean = 13.69, standard deviation = 2.922) exceeded the pre-test scores (mean = 9.68, standard deviation = 3.291). Likewise, the results of the one-sample t-test conducted comparing pre- and post-test scores on our assessment tool for SOC 10200 in the spring semester of 2010 revealed a statistically significant difference in the predicted direction, t(33) = 14.44, p < .01. In other words, the post-test scores (mean = 14.44, standard deviation = 3.027) exceeded the pre-test scores (mean = 10.68, standard deviation 3.022).

A comparison with our sample t-test for pre- and post-tests for fall semester 2008 indicates some differences. They demonstrate that last year in the fall semester 2008, there was more improvement with students in our Basic Concepts of Sociology than this fall semester 2009. The department will discuss this with our faculty teaching the course for this next academic year.

#### Comparative Results

There are 20 questions on the assessment test.

Questions 1-3 measure critical thinking skills by having students ask questions about the three major theoretical paradigms that they use to analyze human behavior and institutions within the course. As demonstrated on the data chart, students made definite progress in most areas.

Questions 4-14 measure knowledge that is integral to the basic content of an introductory sociology course.

Questions 15-20 measure concepts of race, ethnicity, gender, and demography that are important aspects of an introductory course in sociology. As demonstrated on the data chart, students made definite progress in most areas.

## Fall 2009 Results One-Sample Test

	N	Mean	р	Std. Deviation	Std. Error Mean
Pre-test	83	9.86	<.01	3.291	.361
Post-test	83	13.69	<.01	2.992	.328

		Test Value = 0								
			Sig. (2-	Mean	95% Confidence Interval the Difference					
	t	df	tailed)	Difference	Lower	Upper				
Pre-test	27.280	82	.000	9.855	9.14	10.57				
Post-test	41.681	82	.000	13.687	13.03	14.34				

# Spring 2010 Results One-Sample Test

			Р		Std. Error
	N	Mean		Std. Deviation	Mean
Pre-test	34	10.68	<.01	3.022	.518
Post-test	34	14.44	<.01	3.027	.519

		Test Value = 0									
				95% Confide	nce Interval of						
			Sig. (2-	Mean	the Difference						
	t	df	tailed)	Difference	Lower	Upper					
Pre-test	20.598	33	.000	10.676	9.62	11.73					
Post-test	27.818	33	.000	14.441	13.38	15.50					

Again our one-sample t-test analysis demonstrated that in all cases our post-scores exceeded pre-scores using this conventional criterion. So, we can comfortably conclude that our students in SOC 10200 have definitely improved their understanding of the goals and objectives of the SOC 10200 course.

#### J-Term format for SOC 10200.

SOC 10200 is offered every semester including the January term. The integrity of the course is maintained in part due to the intensity of student engagement. The following information reflects the department's attempt to assess students' learning experiences, reflect on their engagement and provide input midway through the course. Because of the long meeting period, the course is conducted in a workshop format utilizing a variety of approaches to learning in order to keep students engaged and enhance participation. The purpose of the learning survey was to provide feedback to the

instructor and, more importantly, to give students an opportunity to recognize the value of the various class activities and evaluate their learning halfway through the course. All of the learning experiences are reflected in the course syllabus, and students had been exposed to each one at least once prior to the assessment.

In keeping with the stated purpose, students were also asked about class preparation and participation. Students were invited to reflect on their midterm progress in relation to their reading habits. Reasons given for not reading the textbook prior to class included: no time, no reason unless to prepare for a test, lack of motivation, preference for taking lecture notes, work responsibilities, viewing the text as not helpful, dislike for reading, sleepiness when reading, and not having a book. Although most students prefer the multiple-choice exam format, approximately 1/3 noted a preference for a mix of multiple-choice and essay. Finally, ninety percent of students felt that points for participation in class should be given based on attendance, leading discussion, answering questions, or voicing an opinion.

Class reading/preparation J-Term SOC 10200, 2009	N=25
Always read the assigned material prior to class	1%
Almost always read the assigned material prior to class	21%
Read the assigned material prior to class sometimes or ½ the time	36%
Does not often or rarely read the assigned material prior to class	18%
Only read before a test	7%
Never read prior to class	11%

Classroom learning experiences rated from 1 = least preferred to 7 = most preferred.January Term 2009 N=28

	1	2	3	4	5	6	7
1. Lecture with PowerPoint	0	2	1	2	6	8	9
2. Lecture without PowerPoint	11	5	3	4	3	1	0
3. Class question-answer sessions,	4	5	4	3	10	1	1
professor calls on students							
4. Open discussions based on specific	1	1	3	1	5	7	11
chapter issues							
5. Video presentations followed by	0	2	1	3	4	6	12
reflective questioning							
6. In-class writing activities such as	8	5	5	4	4	2	0
worksheets or short answer questions							
7. Structured small group discussions	0	2	1	3	4	11	7

Facilitating a positive, interactive learning experience on the accelerated J-Term format is a challenge for instructors and requires a multi-modal approach to enhance interactive learning and student success. Students who are more fully aware of expectations and understand the value of various leaning strategies are more likely to succeed. A midterm student assessment is one way of engaging students in the process.

#### Action Plan

The department discovered that with our assessment tool the one-sample t-tests give us a much more precise measurement for assessing what our students are learning in the GE courses, such as SOC 10200. We will retain this assessment tool to measure the outcomes of our GE classes. Although, we did plan to do a one sample t-test based on an item analysis of our questions, we decided against this. We did not think that this would demonstrate any significant difference in our findings. We are discovering that although the t-test gives us a precise measurement of how the students have improved in their knowledge, we do not think the t-test is sufficient for assessing our student learning.

In 2008, the department reviewed the results of our assessment technique. A number of questions were rewritten on the pre- and post-tests for Basic Concepts of Sociology. The department said last year that it was going to supplement this pre-test and posttest assessment with other more qualitative methods of assessment based on in-class questionnaires. However, it was not done in any systematic manner, and thus the department needs to continue to work on how to do these tasks in a measurable but efficient means in order to provide more comprehensive measurement of student outcomes. This next academic year we have plans to assess a variety of our sociology and anthropology courses.

# **Analysis of Social Sciences for 2009-10**

# Anthropology

The Anthropology/Sociology Department has worked hard to create a statistically significant assessment test while realizing the limits of statistics when measuring human behavior. They are looking at other assessment measures as well, a good sign for a strong assessment program. Not having done assessment is ANT 11200 is an error, because assessment of classes with adjunct professors can be more important than those that deal with full-time faculty when trying to ensure that goals and objectives are being met. The department realizes that and will, in the future, do assessment for its GE classes no matter who is the professor.

### Criminology

The department appears to be asking good questions about what it wants its assessment to do. The assessment report could use some description of the results beyond stating percentages of improvement. More closely comparing the pre-test and

post-test results by area covered would be useful. Having identified a significant problem, the faculty needs to consider if the assessment tells them anything about successes or weaknesses regarding the department's objectives. This is a GE class, so the department needs to assess it as a GE; the faculty may want to do something in addition for the majors who are in this class, as it is also the first class in the major.

#### Psychology

The Psychology Department has done excellent work in looking at how to improve classes through assessment. The new and expanded GE goals are interesting but could be more ambitious than possible for a single class. There are differences between assessment and grading, but the action plan shows that the department is cognizant of the difference. If writing is a significant GE goal, then creating a rubric that can be used in all classes would be a useful step in the development of writing assessment. It's also important to make sure the department's GE goals tie into the University's.

#### Social Work

Overall, Social Work does an excellent job in assessing its classes, with most issues being more technical than process issues. In SW 24000, it would be helpful to explain why the assessment test was changed—what data led to the decision? In the end, it is stated that the objective is met; it would be helpful to clarify whether there is only one objective. Expand on tying assessment to the objectives of the course and the GE program. The department makes good use of student input to improve assessment. In SW 28000, it would be worth noting the success of the non-major, especially as this is a GE class. There should also be explanations of the minimum improvement average the department is looking for and a more explicit action plan. The missing data should be located and included in the 2010-11 report.

# Sociology

The Anthropology/Sociology Department has worked hard to create a statistically significant assessment test while realizing the limits of statistics when measuring human behavior. They are looking at other assessment measures as well, a good sign for a strong assessment program. The J-Term tools showed interesting data; it might be valuable to do the same survey during the regular semester. There are a few weaknesses. They need to match the test results to the course objectives to see if they are being successful across the board or if they have weaknesses to address. The department also needs to reference any adjustments to classes based on the assessment results, either quantitative or qualitative.

# **Mathematics and Natural Sciences**

The study of the Natural Sciences and Mathematics provides an opportunity to develop the logical thinking and quantitative analytical skills required for success in most professional careers today. Lindenwood students are required to take at least one course in mathematics and two in the sciences, one of which must provide laboratory experience. Lindenwood believes a basic understanding of mathematics and the sciences is an important prerequisite for life in an increasingly technological world.

# **Mathematics**

The Mathematics Department offers a number of classes that are required by various schools or departments:

- 1. MTH13100 and MTH14100 required by School of Business
- 2. MTH13400 and MTH13500 required by School of Education
- MTH15100, MTH15200, MTH17000, and MTH24100 required by School of Sciences

Procedure for Mathematics General Education Program Assessment

Each instructor electronically submits the following documents:

- a copy of the course syllabus,
- a copy of the final for each course taught,
- an instructor's epilogue, which is a narrative enumerating accomplishments and recommending improvements plus a performance record on each course objective.

#### **Class Objectives**

Between five and eight objectives were written for each of the mathematics courses offered for general education credit.

Objectives for MTH 12100 - Contemporary Mathematics

The student should be able to

1. formulate preference schedules from individual preference ballots in a real-life scenario and determine the rankings of the choices by using each of four common voting methods (the plurality method, the plurality with elimination, the Borda count, and pairwise comparisons) and relate these to Arrow's Impossibility Theorem;

- 2. determine the fair apportionment of indivisible objects using Hamilton's, Jefferson's, Adam's, and Webster's Apportionment Methods;
- 3. use the abstract concept of a graph with vertices and edges to model real-world situations and find optimal routes for the delivery of certain types of municipal services (garbage collections, mail delivery, etc.);
- 4. determine the best route for real-life scenarios using the Brute Force, Nearest Neighbor, Repetitive Nearest Neighbor, and Cheapest Link Algorithms;
- 5. identify rigid motions and symmetries and apply them to figures, borders, and wallpapers;
- 6. identify issues in the collection of valid statistical data and discuss some welldocumented case studies that illustrate some pitfalls that can occur in the collection of data:
- 7. make and interpret a variety of different types of real-world graphs and calculate some statistical measures for a set of data (mean, median, mode, etc.);
- 8. calculate simple and compound interest, identify various types of loans and compute the interest due, and perform calculations involved in buying a house.

## Objectives for MTH 13100 - Quantitative Methods

#### The student should be able to

- 1. perform basic algebraic operations;
- 2. identify and apply the following business terms: inventory, price/demand function, variable cost, fixed cost, cost function, revenue function, profit function, break-even analysis, and profit/loss analysis;
- 3. identify, graph, and solve linear functions and inequalities by hand and with a graphing calculator;
- 4. graph and solve exponential functions by hand and with a graphing calculator; identify and use various financial formulas such as those for simple and compound interest;
- 5. set up and solve systems of linear equations using algebraic methods and also with a graphing calculator;
- 6. set up and solve systems of linear inequalities; identify the feasible regions and corner points;
- 7. develop linear regression equations using the least squares method and carry out regression analysis;
- 8. write mathematical models to solve real-world business problems using any of the skills listed above.

## Objectives for MTH 13400 - Concepts of Mathematics

#### The student should be able to

- 1. apply a variety of problem-solving strategies, such as guess and check, make a table, make an organized list, identify a pattern, solve a simpler problem, and build a model;
- 2. describe sets using the listing method, set builder notation, and Venn diagrams to find the union, intersection, and complement of given sets;
- 3. explore problems associated with converging and diverging sequences and series, including arithmetic, geometric, recursive, infinite, and the Fibonacci sequence;
- 4. convert numerals to other bases and other number systems and find the GCD and LCM using different algorithms;
- 5. manipulate whole numbers, integers, rational numbers, and decimal numbers;
- 6. perform conversions among decimals, fractions, and percents;
- 7. solve real-world problems involving ratios, proportions, and percents;
- 8. identify basic logic terms and do simple problems.

# Objectives for MTH 14100 - Basic Statistics

#### The student should be able to

- 1. organize raw data into frequency distribution tables and display the data graphically,
- 2. calculate and understand descriptive statistics of a data set,
- 3. solve counting problems using trees and various multiplication rules,
- 4. state the definition of probability and calculate and apply probabilities of events,
- 5. identify probability distributions and apply specific distributions,
- 6. identify the properties of the normal distribution, use the normal distribution in applications, and understand and apply the Central Limit Theorem,
- 7. compute and interpret confidence intervals,
- 8. use hypothesis testing.

## Objectives for MTH 15100 College Algebra

The student should be able to do the following by hand and/or by using a graphing calculator:

- 1. Identify functions, evaluate functions, and find the domain and range of functions.
- 2. Compute the sum, difference, product, quotient, and composition of two functions, and find the domain and range.
- 3. Graph, solve, and find the domain and range of linear functions, functions with absolute value, rational functions, quadratic functions, and polynomial functions.

- 4. Graph, solve, and find the domain and range of linear inequalities, compound inequalities, inequalities with absolute value, polynomial inequalities and use interval notation to express the solution.
- 5. Find the distance between two points in the plane, find the midpoint of a segment, and know the relationship between the equation of a circle, its center, its radius, and its graph.
- 6. Do long division with polynomials and synthetic division and use the remainder theorem and the factor theorem to factor polynomial functions and find the zeros.
- 7. Graph and solve exponential and logarithmic functions and their applications.
- 8. Solve systems of equations by graphing, substitution, elimination, back substitution, and elementary row operations and do applied problems.

# Objectives for MTH 15200 - Precalculus

#### The student should know

- 1. the basic concepts concerning functions: increasing/decreasing, symmetry, one-toone, onto, inverse and know a broad range of examples (2.5);
- 2. how to graph exponential and logarithmic functions and solve related equations by hand and using a graphing calculator;
- 3. how to graph trigonometric functions and their inverses and solve related equations by hand and using a graphing calculator;
- 4. the relation between polar and rectangular coordinates and be able to graph polar functions and solve polar equations;
- 5. the conic sections and be able to recognize their equations and graph them.

## Objectives for MTH 17000 - Survey Calculus

#### The student should be able to

- 1. identify the graphs of linear, quadratic, exponential, and power functions, and to apply these basic functions to a variety of problems;
- find limits both graphically and algebraically; understand the concept of a continuous function;
- 3. given the graph of a function, estimate the derivative at a point using slope, and to graph the derivative of a function;
- 4. find derivatives using the limit definition and the various shortcut methods;
- 5. understand how the first and second derivatives provide information on maximum and minimum points as well as points of inflection and graph a function using information contained in the derivates:
- 6. use implicit differentiation to apply the derivative to a variety of applications through related rates and optimize a function based on the extreme value theorem;
- 7. understand how integration/anti-differentiation is the reverse process of differentiation;

8. understand the indefinite and definite integrals and the Fundamental Theorem of Calculus and use integration in a variety of applications.

## Objectives for MTH 24100 – Statistics for Science Majors

#### The student should be able to

- 1. construct frequency distribution tables and display the data graphically;
- 2. calculate and understand descriptive statistics of a data set;
- 3. understand basic probability, particularly as it applies to random sampling and the binomial distribution;
- 4. understand normal distributions and sampling distributions; central limit theorem;
- 5. be able to apply various t-tests (hypothesis testing) and find confidence intervals;
- 6. understand and apply Chi-square tests;
- 7. understand ANOVA and be able to apply the global f-test;
- 8. understand linear regression and statistical inference for the slope of the regression.

#### Mathematics Courses as Assessment Instruments for the GE Program

For each course, appropriate data were collected from each student who finished the semester. This data were averaged for each objective. If there were multiple sections with different instructors, a weighted average of the data was calculated. In most cases, test scores throughout the semester from the units where the particular objectives were covered were used to provide the data. In other cases, portions of the final exam were used to provide data on the objectives.

Over the years, a departmental consensus has started to emerge that the numerical data developed in such a way tend to be very unreliable. The scores on course objectives could not be compared between different sections of the same course, between different semesters, between different instructors. These scores depend very strongly on the type of questions being asked and on many other factors that cannot be controlled without a heavy dose of standardization of assessment techniques in each course across several semesters. Such standardization would require an enormous expenditure of faculty time and energy, which is currently not available.

The department decided to scale back the scope of assessment of the course objectives. Instead of a numerical measure based on individually chosen tests, assignments, or parts of the final exam, a letter grade will be subjectively assigned by every instructor based on the totality of the performance of the class on that objective during the semester. This method of assessment of course objectives will allow over time to spot the areas of concern and make necessary adjustments and will begin in the 2010-11 academic year.

## Mathematics - Remedial Classes - Fall 2009

There were eight sections of remedial mathematics courses: six section of MTH 10100 and two of MTH 11000. Both remedial mathematics courses, MTH 10100 and MTH 11000, were computer based with randomized tests.

Grade Distribution								
Course	# of students	Α	В	С	D	F	% of ABCs	
MTH 10100	147		120			27	82%	
MTH 11000	49	20	10	8	0	11	78%	

# Mathematics - General Education - Fall 2009

There were 38 sections (five more than in fall 2008) of general education mathematics courses taught by 13 instructors (eight full time and five part time). Most of the increase was in MTH131, a math course for business majors. All instructors except 1 full-time and 1 off-site instructor submitted epilogues for each of their classes.

	Fall 2009	Fall 2008
MTH 12100 Contemporary Math	3 sections	2 sections
MTH 13100 Quantitative Methods	9 sections	4 sections
MTH 13400 Concepts of Math I	2 sections	3 sections
MTH 13500 Concepts of Math II	2 sections	1 section
MTH 14100 Basic Statistics	12 sections	11 sections
MTH 15100 College Algebra	5 sections	5+2 off-site sections
MTH 15200 Precalculus	2 sections	2 sections
MTH 17000 Survey Calculus	1 section	1 section
MTH 24100 Statistics for Science	2 sections	2 sections

#### **Grade Distribution**

Course	# of students	А	В	С	D	F	% of ABCs	% of ABCDs
MTH 12100	61	8	15	23	10	5	75%	92%
101111 12100	01	0	13	23	10	J	7370	<i>327</i> 0
MTH 13100	204	48	40	46	22	56	66%	73%
MTH 13400	53	19	17	12	2	3	91%	96%
MTH 13500	61	24	23	11	3	0	96%	100%
MTH 14100	377	92	87	91	51	56	72%	85%
MTH 15100	131	40	16	38	14	23	71%	82%
MTH 15200	23	1	6	5	8	3	52%	87%
MTH 17000	25	6	8	6	3	2	80%	92%
MTH 24100	45	20	10	8	2	5	84%	89%

Course objective assessment table: Fall 2009

Courses	Students	OBJ.							
	Assessed	1	2	3	4	5	6	/	8
MTH 12100	0								
MTH 13100	0								
MTH 13400	52	72%	81%	88%	83%	68%	71%	78%	71%
MTH 13500	61	83%	78%	78%	NA	83%	83%	75%	78%
MTH 14100	66	71%	75%	76%	77%	35%	44%	75%	50%
MTH 15100	0								
MTH 15200	23	68%	71%	67%	72%	Χ	Χ	Χ	Χ
MTH 17000	24	90%	73%	74%	90%	74%	73%	71%	Χ
MTH 24100	34	88%	89%	90%	80%	80%	90%	88%	75%

## Mathematics - Remedial - Spring 2010

There were eight sections (three more than in spring 2009) of remedial mathematics courses. The department offered six sections of MTH10100 and two sections of MTH11000. Both remedial mathematics courses were computer based with randomized tests.

#### **Grade Distribution**

Course	# of students	Α	В	С	D	F	% of ABC
MTH 10100	154		109		45	5	71%
MTH 11000	37	15	10	5	0	7	81%

## Mathematics - General Education - Spring 2010

There were 44 sections (four more than in spring 2009) taught by 18 instructors – eight full-time and 10 part-time instructors, including 1 instructor teaching off-site. Sixteen sections (36% of the total) were taught by part-time instructors. All but three part-time instructors and one full-time instructor filled out epilogues for each of their classes. No students taking classes off-site are included in our survey.

	Spring 2010	Spring 2009
MTH 12100 Contemporary Math	2 sections	2 sections
MTH 13100 Quantitative Methods	7 sections	6 sections
MTH 13400 Concepts of Math I	2 sections	2 sections
MTH 13500 Concepts of Math II	2 sections	2 sections
MTH 14100 Basic Statistics	14 sections	10+2 off-site sections
MTH 15100 College Algebra	4 sections	4 sections
MTH 15200 Precalculus	2 sections	2+2 off-site sections
MTH 17000 Survey Calculus	1 section	1 section
MTH 24100 Statistics for Science	2 sections	2 sections

## **Grade Distribution**

Course	# of students	А	В	С	D	F	% of ABCs	% of ABCDs
MTH 12100	68	9	15	25	17	2	72%	93%
MTH 13100	206	38	42	47	35	44	62%	79%
MTH 13400	63	14	19	15	10	5	76%	92%
MTH 13500	46	12	14	9	5	6	76%	87%
MTH 14100	383	99	86	83	48	67	70%	83%
MTH 15100	84	13	4	18	17	32	42%	62%
MTH 15200	55	8	8	14	11	14	55%	75%
MTH 17000	15	3	4	2	2	4	60%	73%
MTH 24100	62	12	22	19	6	3	85%	95%

Course Objective Assessment Table: Spring 2010

Courses	Students	OBJ.							
	Assessed	1	2	3	4	5	6	7	8
MTH 12100	0								
MTH 13100	0								
MTH 13400	63	71%	84%	68%	75%	70%	80%	73%	75%
MTH 13500	46	82%	72%	75%	82%	85%	76%	Χ	80%
MTH 14100	0								
MTH 15100	57	90%	61%	83%	53%	74%	67%	79%	х
MTH 15200	0								
MTH 17000	0								
MTH 24100	0								

Actions taken in 2009-10 cycle for Mathematics General Education Program

- 1. In the 2009-10 academic year (as compared with 2008-09) the department offered
  - a. 2 more sections of MTH 10100 for a total of 12 sections,

- b. 1 more section of MTH 12100 for a total of 5 sections,
- c. 6 more sections of MTH 13100 for a total of 16,
- d. 5 more sections of MTH 14100 for a total of 26.
- 2. In the 2009-10 assessment cycle, all new LU students who did not transfer any math credits were required to take specific mathematics placement tests before enrolling. There were two types of placement tests: non-science-track math placement tests and science-track math placement tests.
  - a. Of the 1,068 students who took the non-science-track placement test, 767, or 72%, passed the test and could enroll in one of MTH 12100, MTH 13100, MTH 13400, MTH 13500, or MTH 14100 courses. The remaining 301 students could enroll in MTH 10100 (Basic Mathematics).
  - b. There were three different science-track placement tests for College Algebra, Precalculus, and Calculus.
    - i. Of the 213 students took the College Algebra placement test, 125 of the students, or 59%, passed it and could enroll in MTH 15100 (College Algebra). The remaining 88 students could enroll in MTH 11000 (Intermediate Algebra).
    - ii. The Precalculus placement test was taken by 92 students and only 19 passed it (21%). Those who failed could enroll in College Algebra.
    - iii. The Calculus placement test was taken by 25 students and 11 students passed it. Those who failed could enroll in Precalculus.
- 3. Proficiency test guidelines were established for courses MTH 13400 and MTH 13500 taken by students working on math education certifications for elementary and middle schools. The guidelines were needed due to a high number of students asking to test out of MTH 13400 and MTH 13500 but lacking the necessary background.
- 4. The very low passing ratio in both MTH 15100 and MTH1 5200, in spite of the application of placement tests, is a cause of concern. The passing ratios in MTH 17000 and MTH 24100 are somewhat higher but still troubling. All four of these courses are harder than MTH 12100 through MTH 14100. Instructors complain that many failing students are not used to studying hard and give up too easily. The department operates a Math Lab, which is staffed seven days a week by junior and senior math majors. Few failing students use this lab, in spite of its incessant advertising by math instructors.
- 5. The department continues to improve the Educational Enhancement Center (EEC) our University's way to remedy the poor math backgrounds of some of our students. The EEC is a lecture hall with 50 computers. Every semester we offer 6 sections of a computer-based, self-paced course MTH 10100 (Basic Mathematics). Students who failed the non-science-track placement test were required to take MTH 10100 before taking their required math course. In the 2009-10 academic year, 456 students took MTH 10100, and 345 of them passed it (76%).
- 6. The department tracked the performance of students who passed MTH 10100 in their GE math classes (MTH 12100, MTH 13100, MTH 13400, MTH 13500, and MTH 14100).

- a. Of the 53 students who passed MTH 10100 in fall 2008, 39 (or 74%) have passed the next math course with a D or better and 9 (or 17%) have not taken a math course yet.
- b. Of the 52 students who passed MTH10100 in spring/summer 2009, 28 (54%) passed the next math course, and 14 (or 27%) have not taken a math course yet.
- c. Of the 120 students who passed MTH 10100 in fall 2009, 40 (or 33%) passed the next math course, and 43 (or 36%) have not taken a math course yet.
- 7. The department tracked the performance of students who passed MTH 11000 when they took MTH 15100. From among 12 students who passed MTH 11000 in spring 2009, only six passed the next math course (usually MTH 15100), and 2 have not taken another math course yet. From among 38 students who passed MTH 11000 in fall 2009, only six passed the next math course (usually MTH 15100) with a C or better, seven passed MTH 15100 with a D, and eight have not taken another math course yet. All the rest received a W or an F in MTH 15100.
- 8. Ratios of students passing the course (with grades A, B, C, or D) to all the students on the final roster as follows:

A-D Grades Given	F 09	S 10	F 08	S 09
MTH13100	92%	93%	78%	77%
MTH14100	73%	79%	81%	87%
MTH13400/MTH13500	98%	90%	92%	88%
MTH15100/MTH15200	85%	67%	60%	61%
MTH17000/MTH24100	90%	91%	83%	69%

9. The passing/listed student ratios in MTH 13100, MTH1 3400, MTH 13500, MTH 17000, and MTH 24100 courses are quite satisfactory. The areas of concern are MTH 14100 (this year's ratio is somewhat lower than last year) and, especially, MTH 15100 and MTH 15200 (although the ratio improved somewhat with respect to the last year). However, we must point out that a grade of D in MTH15100 and MTH15200 does not allow the student to take the next math course and the A - C ratio was very low (about 50%).

## Plans for the next cycle (2010-11)

1. The Mathematics Department plans to offer a standardized final examination in all sections of MTH 13100 and MTH 14100 taught by the adjunct faculty. Two faculty committees have been selected (one for each course) to design a common sample final exam plus a sufficient number of versions of the actual final exam. Different versions of the final are necessary because different sections will take their final at different times. This approach avoids the logistic problems of final exam synchronization but allows a significant degree of standardization. The results of this initiative will be evaluated to ascertain whether this approach should be extended to all sections of MTH 13100 and MTH 14100.

- 2. The department will continue offering sufficient numbers of sections of mathematics courses to satisfy the needs of various schools at Lindenwood University. This will require maintaining and further expanding our existing list of well-qualified potential adjunct instructors.
- 3. The department will continue to improve the Educational Enhancement Center, our University's way to remedy the poor math backgrounds of some of our students. In order to improve the success rates of MTH 11000 students enrolling in the next mathematics course, MTH 15100, the computer software used in MTH 11000 (Intermediate Algebra) will be changed to MathLab. This will allow an expanding of the material covered in the course, which was not feasible under the old XY-Algebra software.
- 4. The department decided to scale back the scope of assessment of the course objectives. Instead of a numerical measure based on individually chosen tests, assignments, or parts of the final exam, a letter grade will be subjectively assigned by every instructor based on the totality of the performance of the class on that objective during the semester. This will allow the faculty to spot the areas of concern over time and make necessary adjustments. This method of assessment of course objectives will begin in 2010-11 cycle.
- 5. To improve the rate of success in MTH 15100 and MTH 15200, means have to be found to motivate students to work harder. The MTH 15100 and MTH 15200 are gateway math courses to a science-track career, and many students have not yet developed the necessary study habits to succeed in these courses. One idea to deal with this problem could be the obligatory student math lab sessions for all students with less than a B performance.
- 6. We will continue expanding the role of the student math lab staffed by Work & Learn juniors and seniors with good grades in calculus.

# **Natural Sciences**

Science is a formal method of investigation with the goals of description, explanation, and prediction of a given phenomenon. Through procedures that stress observation and the consideration and testing of potential alternate explanations, science values openness and access to methods and findings, allowing the refinement and improvement of accumulated knowledge. Knowledge in science accrues through research.

To satisfy the Lindenwood general education requirement for a lab science course, the lab portion of the course should include the following types of experiences:

- 1. Use of the scientific method to develop and test hypotheses, design and perform experiments, collect and analyze data;
- 2. At least some of the lab activities should be open-ended rather than "cook book" experiences;
- 3. At least some of the lab activities must include hands-on, not virtual, manipulation of objects and materials.

# **Biology**

#### BIO 10000, Concepts in Biology, and BIO 11000, Principles in Biology

These courses are designed for non-majors, and they satisfy the general education requirement for a laboratory based course. The following objectives are expected to be met by every student upon successful completion of this course:

## Objectives

- 1. Students will learn and understand the scientific method, including hypothesis formation, experimental testing, data interpretation, and formulation of conclusions. Students will also clearly understand the distinct meanings of scientific hypotheses and theories and the difference between primary and secondary sources of information. Throughout the course, students will employ the scientific method and use critical thinking skills, both in lecture and laboratory.
- 2. Students will learn and understand basic cell chemistry, including properties of water, structure and function of macromolecules, prokaryotic and eukaryotic cell structure and function, nutrition, cellular respiration, and photosynthesis. Students

- will also study global warming and how it relates to the cellular processes of respiration and photosynthesis.
- 3. Students will learn and understand the basic principles of genetics including DNA synthesis, mitosis, meiosis, inheritance, Mendelian genetics, quantitative traits, transcription, translation, and the role of genetically modified organisms in today's world. There will be emphasis on the molecular basis for inheritance of traits and how these mechanisms provide a foundation for understanding biological evolution.
- 4. Students will learn and understand the theory of evolution and its role as the foundation for understanding the biological sciences. Students will learn the historical development of the theory, study the evidence for evolution, and discuss the validity of alternatives to the theory of evolution. Natural selection will be studied as the mechanism for evolutionary change and how evolution through the mechanism of natural selection has led to diversity of organisms. Students will study and analyze biodiversity and classification of organisms, including the concept of speciation.
- 5. Students will learn and understand the basic principles of ecology, including population ecology, community ecology, ecosystem ecology, and conservation ecology. Students will learn about the Earth's biomes, both terrestrial and aquatic. Throughout their study of ecology, students will learn about the impact of human population growth on species extinction rates, modification and loss of habitat, and nutrient cycling within the biosphere.
- 6. Students will ultimately gain a greater understanding of the role of biology in their everyday lives, hopefully developing them into informed citizens who can critically analyze information presented to them regarding important issues related to biology.

### Results

Out of 30 multiple-choice questions

	Pre-test	Post-test	Change	% Improvement
Mean	13.5 (45%)	17.5 (58%)	+4	+77.1%
Median	14	18	+4	
Range	0-25	5-28		

Results between the pre- and post-tests were significantly different (p=<0.001, Mann-Whitney Rank Sum Test). Scores on assessment tests were significantly higher after completion of the course. The improvement percent for 09-10 is an increase of 7.5% over 2008-09 results, likely a result of improved quality of adjunct instructors, who are the primary instructors for these courses, and the addition of full-time faculty who participate in teaching these courses.

### Results of goals for 2009-10

 Goal: Continue to request additional full-time faculty. For the projected schedule for fall 2009 and spring 2010, 58% of our general education courses are being taught

by adjunct faculty. It is our goal to bring that down to 20% with the hiring of additional full-time faculty. Although we have hired two full-time personnel in the last two years, demand for our courses has also increased, resulting in no improvement in the number of general education courses being taught by full-time faculty.

- o Result: Two additional full-time faculty members were hired for 2009-10.
- Goal: Complete assessments in all general education courses. The use of WebCT facilitates completion and analyses of assessment tests; the faculty is discussing wider deployment of this delivery method.
  - Result: Mixed. Due to the large number of adjuncts and last-minute changes in instructors for several sections, assessments were not completed and/or analyzed as planned at the beginning of 2009-10. Full-time faculty assigned to supervise adjuncts and assessment for general education courses must improve reporting for the department to have a complete, accurate examination of general education course objectives.

### Goals for 2010-11

- Goal: Continue to request additional full-time faculty. Despite recent hiring, participation by full-time faculty in the general education course offerings is extremely low. The recent faculty course load reduction negated gains made toward our stated goal of 20% course assignment to adjunct faculty.
- Goal: Complete assessments in all general education courses. The use of WebCT facilitates completion and analyses of assessment tests; the faculty is discussing wider deployment of this delivery method.

# Chemistry

### Goals

Students will obtain a sound knowledge of chemistry as it relates to modern issues and increase their critical thinking skills and ability to evaluate data for scientific analysis.

### Objectives

Students will demonstrate a sound understanding of the major concepts in chemistry and relate these to specific cases. These concepts include atomic theory, chemical bonding, periodic properties of the elements, balancing chemical equations, stoichiometric calculations, acids and bases, gas laws, and an introduction to organic chemistry. Students will examine modern day technological issues such as the ozone layer, greenhouse effect, nuclear chemistry, and others through a statement of the

problem, critical analysis, and discussion of possible solutions both scientifically and socially acceptable.

## Assessment Techniques

## CHM 10000 - Concepts of Chemistry

In accordance with the previous years' goals, the department is focusing on a uniform pre- and post-test that will be given to students in CHM 10000. The number of sections of this course that are offered each semester has grown dramatically as has the number of adjunct instructors that are teaching this course. This change has created a challenge for the program in gathering data for the course that is uniform among sections, semesters, and instructors. During the 2009-10 academic year, useful pre- and post-test data was not gathered among all sections. The department has targeted this as an area of concern for effective assessment of this key GE course and will have a "full-time" faculty member that will organize and implement the pre- and post-test for all of the sections that are offered as well as for all of the instructors that are teaching the course. In addition, a 4-week evaluation will be given so that the department can address any areas of concern regarding the course, laboratory, textbook, or instructor.

## CHM 11100 - Environmental Science

In previous years, a pre- and post-test has been given to students that targeted the definitions and concepts taught in environmental science. The results of such testing have shown that the students, by and large, come into the course with very little knowledge of environmental science material and exits with an improved score of at least 50%. With this in mind, the department is now focusing on the larger concept of global perspective that the students gain in the course. This course is designed to teach basic environmental science principles, but it also has a larger goal: to teach the students to think critically about the interrelationships of global phenomena including climate, population, politics, societal norms, etc.

With this in mind, the students were asked to write an essay during the first week of class explaining what they believed were the greatest environmental problems facing the world today and why. The same essay was given as part of the final exam. Keep in mind that there is no correct answer to the question and that the focus of their grade for the final essay was their explanation as to why they chose the topic or topics as concerns.

This semester the majority of the students were non-traditional adult students, many of whom were employed full-time, had children, and were at least 30 years of age. As with the previous year's results, these students also showed a marked change from their preliminary essay to their final essay, but the adult students were more capable of

linking the issues that were covered to current events, topics, and political issues from the semester. Each of the adult essays was excellent in evaluating environmental concerns with a decidedly modern focus while also linking to historical significance. As these students had lived through many of the historical issues that were discussed in the class, they were better able to absorb the significance of the development of modern policy and laws than the traditional day students. The instructor will therefore modify the discussion topics to address the historical progression of policy in the future, but will continue this method of assessment as it appears to be effective in addressing the critical thinking necessary for the course.

## CHM 23000 - General Chemistry 1

This course was assessed by giving a pre- and post-test. The pre-test was given on the first day of class and was 25 multiple-choice questions. Students were not told about the pre-test or given a review or chance to study. Any student scoring better than 75% was given the opportunity to skip CHM 23000 General Chemistry 1 and instead take CHM 23100 General Chemistry 2 and CHM 24100 General Chemistry 2 Lab. Five students out of 92 (in three different sections) were given this opportunity, and four chose to switch. Of those four students, three successfully completed General Chemistry 2, while one student dropped out due to a change in major. The average overall on the pre-test was 48%. This same exam was given on the last day of class as a post-test. The average on the post-test was a 76%. In general, it was found that students who received an A in the course received scores of 75% or better on the posttest, and students that got Bs and Cs received scores of 60-75% on the post-test. Although students are still scoring lower on the post-test than the department would like, this could be partially due to students not working as carefully on an exam that is not graded. In the future, we are planning to post a practice exam for students to have access to study for the pre-test.

### Action Plan for 2010-11 Academic Year

- CHM 10000 There will be at least six sections of CHM 10000 offered in the 2010-11 academic year which will be taught by multiple instructors. In addition,
  - o the department is adopting a new assessment exam with both a pre- and posttest that is analyzed question by question for knowledge, comprehension, and application. These results will then be correlated in order to evaluate the consistency among different faculty for individual topic coverage and achievement of basic competencies;
  - o a 4-week evaluation will be given to the students analyzing effectiveness of lecture material and teaching approach, effectiveness of both the lecture and laboratory text, as well as general use and success of the chemistry tutors. Based upon the mid-semester evaluation, the chemistry faculty will meet and modify tutor hours, text assignments, and possible lecture approach in order to promote

student success and facilitate access to assistance outside of the lecture sessions.

- CHM 11100 A pre- and post-essay-style test will be given to all students for both the fall and spring semesters.
- CHM 23000 A review for the pre-test will be posted prior to the start of the semester. Students will be given a multiple-choice pre- and post-test. In addition, mid-semester evaluations will be given for those courses that are taught by adjunct instructors. These evaluations will be reviewed with the instructor to address any areas of concern.

### **Earth Science**

All of the Earth Science classes are general education classes.

## ESC 13000 - Astronomy

### Overview

All topics assessed on the post-assessment test were covered in the course. In addition, the course covers five chapters not assessed, including galaxies, quasars, cosmology, and extraterrestrial life. Each topic was discussed in two to three lecture periods, five were enriched by videos, and three included in-class, hands-on activities. Opportunities were available both semesters for students to participate in stargazing or other telescope activities. Each topic was assessed with four tests, and a final exam composed of questions formatted as multiple choice, short answer, or diagrams. All exams were cumulative. Most of the questions were taken directly from the textbook website online quizzes.

### **Assessment Results**

Low scores (<50%) occurred in most of the objectives.

Year		Fall	2009		Spring 2010			
	Section	Section 11 Section 12		Section 11		Secti	on 12	
Objective	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Average	33%	42%	29%	33%	42%	73%	74%	51%
Bloom								
Knowledge	38%	49%	31%	38%	38%	49%	31%	38%
Comprehension	29%	38%	31%	33%	29%	38%	31%	33%
Application	37%	39%	30%	28%	37%	39%	30%	28%

## **Analysis of Results**

The faculty member who taught the course was hired just a week before the semester started. That meant that both astronomy courses were "start-ups" for her. As a result, she did not have time to focus on the objectives and covered the material that she had taught at other universities. Consequently, the outcome was very low. The students even remarked in their course evaluation that most of the time they did not understand what she was talking about.

## **Proposed Solutions**

The solution proposed for the spring semester was to reevaluate the course in light of the objectives and be sure to concentrate on them. The pre-test/post-test structure would be used as a basis to develop the course ensuring that the objectives were met. An analysis of the results conducted for the spring semester reveals that there was significant improvement. Only section 12 appeared to have difficulties with improvement in the course materials. This could just be a function of the ability level of the class. This will be monitored in the next school year to make sure that a trend is not developing.

## ESC 31000 - Environmental Geology

Not taught this academic school year.

### ESC10000 - Physical Geology - Section 11

### Overview

This year, 15 of the 17 objectives were discussed in lecture and lab in various forms, either by lecture, discussion, or hands-on experience. Objectives 16 and 17 were not covered as there was not enough time in the semester. Two lab days were lost due to school events and snow days.

The reviews in each of the chapters were covered to highlight the important topics in the chapters. Student progress was evaluated with weekly quizzes, three major exams, and a final exam. To enhance learning, a day-long field trip was conducted. There were two parts to it. Prior to going on the field trip, the students had to research selected topics and write up their discoveries. The second part was to actually view, analyze, and draw selected geologic features they saw on the trip.

#### Assessment Results

After reviewing the pre-test/post-test results, the results for the fall semester are terrible. The scores for the majority of the objectives fell below the 50% mark. The spring semester was just the reverse, only one objective score fell below 50%. There is no logical explanation for what occurred. Improvement was minimal in the fall with one objective score becoming worse at the post-test time.

In reviewing the data, learning did take place, as no one retrograded. The question that has never been answered is what should the percentage increase be? Is it even possible to evaluate this in terms of significance?

## **Proposed Solutions**

The professor teaching this course will not be teaching Physical Geology next school year. So follow-up will not be possible.

### ESC10000 - Physical Geology - Section 12 and 13

#### Overview

All topics except some map questions were covered in the course. The last chapter covered, Coastal Processes, was not included in the assessment results. Objectives were covered in one or two lecture periods, most were covered in lab exercises, two were enriched by videos, and some were discussed on the required field trip. Content was assessed with five cumulative tests composed of multiple-choice, short-answer, matching, and/or diagram-labeling questions during fall semester and by weekly quizzes in place of cumulative exams during spring semester. Comprehensive final exams were given in both semesters. Most of the multiple choice and matching questions were taken directly from the textbook website's online quizzes. Diagrams and open response questions originated from the textbook or faculty.

#### Assessment Results

Scores lower than 50% are addressed below, with averages of all sections involved shown in parentheses following the objective number. Low scores occurred in four sections for objectives 1 (33%) and 8 (39%); in two sections for objectives 10 (45%), 13 (47%), and 16 (49%); and in one section for objectives 5 (41%), 7 (39%), and 12 (45%).

### Analysis of Results

Scores on objective 1 (plate tectonics) rose from the previous academic year from an average of 13% to an average of about 33%. The rise might be explained by the format of the questions; open-response questions were replaced with multiple-choice this year. Plate tectonics is presented early as a foundational concept. Students might be overwhelmed by the terminology at the same time they are settling into a new semester and never fully recover. Revisiting plate tectonics later might remediate the discrepancy.

The average score of 39% for objective 8 (geologic time) suggests that more time is needed for this topic. Further, there is resistance to some of the concepts presented in this chapter on the part of some students that might be difficult for them to resolve.

More exposure time is probably needed to improve the scores for the remaining lowscoring topics.

## **Proposed Solutions**

Offering to use the better of the two scores, the post-assessment score or final exam score, seemed to improve performance on the post-assessment test as it was taken more seriously by the students. Because more time on each topic is not available during the semester, we have options that include the deletion of topics or assignment of some topics as homework with high point counts. While the latter seems ideal, time is not available for instructors to properly advise students and assess extensive homework assignments.

There is always room for improvement. The department has begun to integrate the lab with the lecture to implement more inquiry-based learning, and there is evidence of some improvement. Trade journals (e.g. Journal of College Science Teaching, NSTA) occasionally provide suggestions that can be used to improve teaching and learning issues.

## ESC10000 - Physical Geology - Section 14

### Overview

This section was taught for the first time by an adjunct professor during the spring semester, so this class was a start-up for her. She used the objectives to define her lesson plans. She also used materials from other professors as well as her own materials.

#### Assessment of Results

This professor was able to administer the pre-test and post-test. There were nine objectives in the post-test that were below 50%. Although the professor realizes this, she will need time to hone her course to the defined objectives.

## **Solutions Proposed**

This professor will be monitored to ensure that her post-test results show significant improvement in the next semester, as she should have all the start-up problems ironed out by then.

### Results

## ESC10000 Assessment Data - Fall 2010

Section	ESC1	0011	ESC1	.0012	ESC1	0013	ESC:	10014
Objective	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Average	33%	45%	36%	52%	34%	56%	0%	0%
Bloom								
Knowledge	46%	52%	47%	60%	46%	65%	0%	0%
Comprehension	31%	44%	35%	50%	39%	58%	0%	0%
Application	38%	42%	43%	55%	41%	59%	0%	0%

## ESC10000 Assessment Data - Spring 2010

Section	Section	า 11	Section	12	Section	13	Section	14
Objective	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Average	34%	69%	36%	66%	38%	64%	27%	45%
Bloom								
Knowledge	38%	63%	40%	66%	42%	64%	31%	55%
Comprehension	37%	70%	43%	73%	43%	68%	30%	47%
Application	36%	71%	38%	64%	40%	61%	34%	47%

## ESC 20000 – Introduction to Geographical Information Systems

Not taught this academic year.

## ECS 11000 – Meteorology

## Overview

Meteorology continues to be a very popular class. Two sections are offered every semester. The students are challenged with weekly quizzes, two exams, a final exam, and six concepts. The experiment conducted in the previous school year that analyzed student success based on a Kolb learning style did not yield any groundbreaking information. There was not enough data to draw any statistical conclusions.

#### Assessment Results

In the fall, objectives 1 and 2 in Section 11 and objectives 1, 7, and 13 in section 12 had post scores less than 50%. There did not appear to be any trending, other than objective 1 (structure of the atmosphere) seems to be a problem from previous years. Students were asked to write a short paper about the structure of the atmosphere, and it became an essay question on the exam. None of these actions seemed to help.

In the spring, objective 13 in Section 11 and objectives 8, 11, and 13 in Section 12 had scores less than 50%. Objective 13 (climate controls) seems to be a problem for both sections. The concept was part of an essay question on the final exam. However, discussion about the topic was done after the post-test.

	Fall 2009				Spring 2010			
	ESC1	1011	ESC1	ESC11012		1011	ESC1	.1012
Test	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Average	42%	58%	43%	57%	42%	67%	44%	57%
Bloom								
Knowledge	33%	54%	34%	57%	33%	64%	34%	56%
Comprehension	48%	59%	50%	60%	49%	70%	50%	57%
Application	51%	68%	52%	69%	56%	79%	57%	69%

## **Analysis of Results**

Since the discussion of the climatic controls took place after the post-test was administered, the students did not have a chance to absorb the material. So, next semester the post-test should not be administered until all the material has been presented.

### **Proposed Solutions**

Monitor the timeline for the class to make sure that plenty of time is allowed for discussion of key concepts.

### ESC 12000 - Oceanography

#### Overview

This course was taught online during the spring semester. An online pre-test and posttest was administered to the students. Fifty-eight questions were part of the assessment. However, no relationship to the original objectives could be located. Therefore, the assessment has no real value.

## Proposed Solution

Align the questions to the objectives, and then evaluate the results.

## **Program Action**

- Astronomy: monitor assessment.
- Physical Geology: monitor assessment; reevaluate assessment at the end of the fall semester to ensure new professor is presenting materials adequately.
- Meteorology: monitor assessment; modify lesson to cover objective 13 before issuing the post-test.
- Oceanography: align assessment questions to objectives; then administer the tests.

# **Analysis of Mathematics and Natural Sciences for 2009-10**

### Math

The Math Department is active in developing multiple methods of assessing its classes. It would be worth including any relevant observations regarding the classes from the epilogues in the assessment process. It is a good beginning to look at the potential impact of the ECC and MTH 10100 and MTH 11000 on students' success rates. Beware of using subjective letter grades for determining success with objectives, as factors other than student progress could influence the process. The creation of some measure that will allow the department to determine growth and progress will be very helpful.

### Biology

Direct oversight of the Adjunct faculty by full-time faculty is a good effort to ensure assessment is taking place in all of the GE classes. There needs to be more explanation and connection of the assessment to the course objectives. Is scoring 58% on the posttest where the department wants to be? What did the results of the assessment tell the department? Are there any other GE classes offered by the Biology Department?

### Chemistry

The Chemistry Department is using a new assessment tool for the next academic year for CHM 10000; they are using a more qualitative study of student learning, which is a very workable idea. When evaluating CHM 11000 they should consider using a rubric when analyzing the written work to give a constant and quantitative aspect to this study. Beware of posting a review for a pre-test, as it limits the value of the information

gained. If the test is really a placement test and not an assessment, that can be very useful to students, but it has much less value in telling how much students knew when they walked in the door.

### **Earth Sciences**

The Earth Sciences Department has always been a leader in areas of data collection and analysis. Clarifying the class objectives in the report would make the tables more useful. ESC 11000 can be created as a single section of the report with each class section having any problems or concerns noted. The action plan should reflect any proposed changes to the method of instruction or other types of course improvements. What does "monitor assessment" mean? Discovering that an assessment tool was not assessing what the department needed is good, and the department has moved on to the next phase of realigning its assessment program.

## **CBASE**

The College Basic Academic Subjects Examination (CBASE) is a criterion-referenced achievement test that assesses knowledge and skills in language arts, mathematics, science, and social studies. Concurrently, the exam measures three cross-disciplinary competencies: interpretive reasoning, strategic reasoning, and adaptive reasoning.

Prior to entry into the Teacher Education Program, all students must successfully pass all areas of the CBASE, including the writing component. While students are not denied the opportunity to enroll in education courses and begin their pre-service teacher education, they are not officially admitted to the Teacher Education Program until successful completion of all components of the CBASE exam.

The value of the CBASE as an assessment tool is limited by the lack of continuity in preparation by students before taking the exam. It is possible to have not taken courses in the various areas before taking the exam and thus receive a lower score than they would have if they had taken the appropriate courses.

As the number of transfer students increases, the value of the CBASE as an assessment tool will diminish, as more students will have received some or all of their preparation at other institutions.

Below are the CBASE Results

Composite - Lindenwood Students / Students Statewide since 2004 Cumulative Passing Rates by Subject

		English	Writing	Math	Science	Social Studies
	Lindenwood	78%	83%	83%	77%	69%
2009-10	Difference	-5%	-5%	0%	-2%	-7
	State	83%	88%	83%	79%	76%
	Lindenwood	79%	83%	82%	77%	69%
2008-09	Difference	-4	-5	-1	-2	-7
	State	83%	88%	83%	79%	76%
	Lindenwood	79%	86%	82%	77%	70%
2007-08	Difference	-5	-4	-1	-3	-7
	State	84%	90%	83%	80%	77%
	Lindenwood	79%	86%	82%	78%	71%
2006-07	Difference	-5	-4	-1	-2	-7
	State	84%	90%	83%	80%	78%
	Lindenwood	79%	86%	82%	78%	72%
2005-06		-5%	-4%	-1%	-2%	-6%
	State	84%	90%	83%	80%	78%

<sup>\*</sup>We will continue to compare the CBASE results for the last five years in this report.

These numbers have remained relatively consistent over the last five years for both the state and the University but have shown a slight improvement in math.

Below are the CBASE Results for African-American students at Lindenwood since 2005. The results show that Lindenwood's African American students generally exceed the statewide averages in 4 of the 5 categories.

## Cumulative Passing Rates by Subject

		English	Writing	Math	Science	Social Studies
	Lindenwood	55%	69%	67%	58%	47%
2009-10	Difference	+2	+5	+18	+11	-2
	State	53%	64%	49%	47%	51%
	Lindenwood	55%	70%	65%	59%	50%
2008-09	Difference	+1	+6	+17	+12	-2
	State	54%	64%	48%	47%	52%
	Lindenwood	55%	72%	67%	59%	51%
2007-08	Difference	+1	+6	+19	+12	-2
	State	54%	66%	48%	47%	53%
	Lindenwood	56%	71%	68%	60%	52%
2006-07	Difference	+2	+5	+20	+12	-1
	State	54%	66%	48%	48%	53%
	Lindenwood	55%	72%	68%	59%	53%
2005-06	Difference					
	State	54%	65%	48%	48%	53%

<sup>\*</sup>We will continue to compare the CBASE results for the last five years in this report.

Lindenwood's results on the CBASE tests for the last year have generally remained steady. The percentage of students passing has varied little over the last few years.

Cumulative Passing Rates by Subject Comparison with Four-year and Private Colleges

		English	Writing	Math	Science	Social Studies
	Lindenwood	78%	83%	83%	77%	69%
	Difference	-5%	-5%	1%	-3%	-7
2009-	4 yr Inst - State	83%	88%	84%	80%	76%
10	Lindenwood	78%	83%	83%	77%	69%
	Difference	-4%	-4%	+2%	-0%	-5
	Prvt Inst - State	82%	87%	81%	77%	74%
	Lindenwood	79%	83%	82%	77%	69%
	Difference	-5	-5	-2	-3	-8
2008-	4 yr Inst - State	84%	88%	84%	80%	77%
09	Lindenwood	79%	83%	82%	77%	69%
	Difference	-4	-4	+1	+0	-5
	Prvt Inst - State	83%	87%	81%	77%	74%
	Lindenwood	79%	86%	82%	77%	70%
	Difference	-5	-4	-2	-3	-8
2007-	4 yr Inst - State	84%	90%	84%	80%	78%
08	Lindenwood	79%	86%	82%	77%	70%
	Difference	-4	-3	+1	+0	-5
	Prvt Inst - State	83%	89%	81%	77%	75%
	Lindenwood	79%	86%	82%	78%	71%
	Difference	-5	-4	-2	-2	-7
2006-	4 yr Inst - State	84%	90%	84%	80%	78%
07	Lindenwood	79%	86%	82%	78%	71%
	Difference	-4	-3	+1	+1	-5
	Prvt Inst - State	83%	89%	81%	77%	76%

Lindenwood has remained reasonably close to the state averages over the years, and due to the increasing number of students who will have taken the test, any significant increase in the Lindenwood numbers will not be reflected for some time.

# **Assessment of General Education Overview**

### General Education – Some Observations

- The current University GE program is a cross between a class-based and a knowledge (concept)/skills-based system.
  - The combination works well at Lindenwood.
- The Lindenwood faculty continues to show a still-growing commitment to making general education valuable to both the student's academic and personal growth and assessment of that growth.
- The wide range of courses participating in general education assessment ensures that almost all Lindenwood students have their learning assessed, usually multiple times during the year.
- This year, a number of programs updated and changed assessment tools and programs.
  - The University realizes that assessment is about looking at both success and improvement, thus academic programs use assessment to recognize successes as well as to identify and understand weaknesses.
- Lindenwood instructors participating in general education assessment are working to provide objective (quantifiable) measurements of student learning.
  - The University is encouraging the use of both qualitative and quantitative methods of assessment.
- Student improvement is a constant over the years of assessment, that is, students have demonstrated "value added" from courses. While the results in some programs may have slipped as to the degree of improvement, this may be due to improvements in assessment processes, techniques, and objectives.
  - More precise assessment that leads to more accurate and stringent academic goals is ultimately a positive outcome.
- Some programs still have problems closing the loop on assessment in a formal process, taking data and using it to adjust classes and programs accordingly.
  - This process is undoubtedly going on informally but needs to be formalized and captured for the purposes of transparency and accountability.
- Basic programs
  - o The addition of MTH 10100, Basic Math, and the Educational Enhancement Center are important improvements to the math program for students who are weak in math skills.
  - The writing center moved into new and more spacious facilities in August 2009 making it more accessible and comfortable for students from all programs to use. The University has also been able to expand the use of ENG 11000 though more objective placement testing in English, which should, over time, lead to higher success rates in ENG 15000 and ENG 17000.

### Written and Oral Communications

- o The students' ability to communicate effectively and correctly in written English will be increasingly emphasized and assessed across all academic programs.
  - Greater success in this area will be expected as more native-speaking students will be able to take ENG 11000, Effective Writing, before taking ENG 15000, Composition I, because of the success of the University's English Proficiency Program (which is for non-native speakers) and the creation of a writing course designed with the nonnative speaker's needs in mind.
  - Both COM 11000 and SW 10000 classes use multiple methods of assessment rather than relying on a single tool.

## Fine and Performing Arts

 Professors in the Music program continue to be among the University leaders in working on their assessment program. They are making efforts at expanding their assessment program to all of their classes. Theater and Dance are also making strides to getting assessment into greater numbers of their classes. The Dance program's use of taping students for both current and future evaluation is a good idea.

### Humanities

- The English Department is working on assessment tools that incorporate both knowledge and skills in their literature assessments.
- Philosophy and Religion are developing comprehensive assessment programs that they will be implementing over the next year. Religion has begun to use its new tools in classes and has done a good job of asking questions about the program. Philosophy is developing a tool that will allow for the professor to assess each section by semester.

## Civilization / Cross Cultural

- o Foreign Languages continues to have one of the University's most comprehensive assessment programs, as they assess every class they teach, but they do want to look into expanding the objectives they assess.
- The History Department's assessment of HIS 10000 has been severely limited by the movement from full-time faculty as the primary instructors to primarily adjuncts, but they are currently working on a system to rectify the problem.

## US History / Government

o HIS 15500 has generally been a success, but there are identifiable weaknesses which need to be addressed. The assessment tools have been changed to be more comprehensive of the material that will be covered when the class becomes a 10000 level class.

### Social Science

Psychology has once again begun to expand their course assessment efforts.

- Anthropology / Sociology are continuing to look at methods beyond their current testing and statistical analysis in order to get a more holistic view of their classes.
- **Mathematics and Natural Sciences** 
  - o In the Biology Department, moving toward direct oversight of the adjunct faculty members by full-time faculty members is a good effort to ensure assessment is taking place in all of their GE classes.
  - o Chemistry's combination of essay and objective testing is in interesting idea, and it will be interesting to see the development.
  - o Earth Sciences continues to be a leader in the collection of data.
  - o The students' ability to work effectively in math will be increasingly emphasized.
    - The Math Department has begun to examine the success of the placement test for math classes to see if students who test into MTH 10100 or MTH 11000 are successful in their GE math classes.

# **General Education Action Plan**

- The University Assessment Committee Structure will be redesigned with the process of oversight of school programs being devolved back to the schools, while the GE program will be overseen by a University-wide committee, which will work in conjunction with the GE committee.
- The Assessment Committees will continue to look at the concept of GE across the curriculum. We will encourage majors/programs to consider how they continue to work toward our GE objectives and look for methods of assessing this in our non-GE classes.
- Faculty members will be encouraged to continue, where possible, to work crosscurricular material and the GE objectives into the non-GE classes. The discussion of the relationships between their classes and other subjects both within and outside of their discipline will benefit our students understanding of the purpose of GE.
- The GE report will continue to evolve to include more material that looks beyond class-based assessment and into the larger goals of the University.
- The GE Committee will continue the process of more clearly defining general goals for each of the seven GE subject areas both to better define what they bring to the students' education and to allow for better assessing the success in each area.
- The University will examine the success of the English placement tool.
- The English Proficiency test that was put in place during the 2005-06 academic year in order to assess the students' basic competence in writing organization, grammar, spelling, and in writing appropriate to each discipline, is now a graduation requirement. Effort will be made to determine the success of the testing.
- More assessment tools will be specifically aimed at areas that may be considered problematic within GE courses.
- Faculty members will be encouraged to promote student involvement in assessment of GE classes via the use of CAT's, surveys of student attitudes, and expectations.
- Faculty will be encouraged to review and, where necessary, revise course objectives to reflect appropriate general education objectives in both GE and non-GE classes.