

# Improving Student Learning



## Fall 2012 Report

## **Forward**

In 2009, Luna Community College took a progressive approach to student learning with a reorganization of learning goals for all programs of study and implementation of an institutional assessment plan. In addition, LCC recognized a need for a standard syllabi with a focus on student learning outcomes and methods to measure those outcomes.

This fall 2012 report on Improving Student Learning is a testimony to LCC's commitment to assessment.

Vidal Martinez, Ed.D.  
Vice President for Instruction  
Luna Community College

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## **LCC's Principles of Assessment**

- Primary goal of Assessment is to continuously improve student learning at Luna Community College.
- Assessment is an extension to the needs and attention of students at Luna Community College.
- Assessment is ongoing at Luna Community College.
- Assessment activities must be useful to the individuals that conduct them, to programs, and to Luna Community College.

## **LCC's Assessment Plan**

All course offerings, including degree and certificate programs, at Luna Community College are required to follow the four step assessment process. They include:

- A list of expected learning outcomes
- Assessment tools that directly measure those learning outcomes
- The results of the data, and
- How the data will be used to improve student learning

## Luna Community College: Improving Student Learning –Fall 2012 Report

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**Mass Media Communications**  
**Summary Assessment Report**  
**MMC135: Intro to Digital Film Making**

Prepared by Joe Giglia, Adjunct Faculty

**PURPOSE**

The purpose of this report is to assess student learning in Intro to Digital Film Making course based on student performance throughout the semester. The focus of the report is on how the outcomes of the assessments conducted during the delivery of the course are and can be used to inform decisions on modifications to course content, emphasis, assessment and teaching approaches.

**BACKGROUND**

In this course, students are introduced to the use of basic digital production equipment, concepts and techniques, providing a theoretical and practical foundation for more advanced production courses. Topics will include: Understanding the digital camera, shooting rules, principles & techniques, shot types, live editing, microphone use and selection, TV studio production and roles.

**COMPETENCIES:** Upon successful completion of this course, with a minimum of 70%=C or better, the student should:

1. Identify and use the basic parts, ports, connection types and functions of a video camera.
2. Demonstrate knowledge and understanding of digital film production terminology.
3. Describe and demonstrate roles and tools used during digital production.
4. Demonstrate use of shooting rules, principles, techniques and shot types
5. Use various microphones and audio equipment.
6. Utilize scripts in a production.
7. Demonstrate knowledge of live video editing.
8. Analyze and critique completed productions.

**ASSESSMENT METHODS AND TOOLS:**

1. Group activities
2. Verbal quizzes/demonstrations
3. Attendance
4. Participation / performance
5. Peer training
6. Final product

**SUMMARY OF RESULTS:**

Table 1 displays the results of student achievement based upon the learning objectives. 100 percent (100%) of student's achievement was good to excellent. The most glaring was "Competency 1's" class average of 3.2%, illustrating the need for improvement in the area of

Camera knowledge. All students showed great ability in the use of the tool. However when it came time to demonstrate a more in depth, technical knowledge of the tool, there was a deficiency.

#### RUBRIC RATING

5 Excellent, 4 Good, 3 Fair, 2 Unsatisfactory, 1 Poor

COMPETENCY	STUDENTS					COMPETENCY AVERAGE
	A	B	C	D	E	
1**	3	4	3	3	3	3.2
2	4	4	4	4	4	4
3	4	5	4	5	5	4.6
4	5	4	3	4	5	4.2
5	4	5	4	3	3	3.8
6	4	5	5	5	5	4.8
7	5	5	5	5	5	5
8	4	4	4	4	4	4
STUDENT AVERAGES	4.13	4.5	4	4.13	4.25	

#### IMPROVEMENTS:

1. Include more technically related activities with focus on deeper knowledge of tools.
2. Add more oral presentations to focus on microphones and camera parts and functions.
3. Incorporate more technically based assessments (quizzes, tests)
4. Add more demonstration-based assignments during class.

**Department of Mathematics**  
**Summary Assessment Report**  
**MATH 116: Intermediate Algebra**

Prepared by Julie Vigil, Cimarron High School

**PURPOSE**

The purpose of this report is to assess student learning in the Intermediate Algebra course based on student performance throughout the semester. The focus of the report is on how the outcomes of the assessments conducted during the delivery of the course are and can be used to inform decisions on modifications to course content, emphasis, assessment and teaching methodologies.

**BACKGROUND**

The Intermediate Algebra class is a dual credit class taught at Cimarron High School.

As described in the LCC Catalog: This course is the study of linear equations and inequalities, linear functions in two variables, systems of linear equations, polynomials and rational expressions, factoring and its applications, solving quadratic equations, evaluating and simplifying radicals and the quadratic formula. Applications in the areas of technology, medicine and business will be emphasized.

**PURPOSE AND OBJECTIVES OF THE COURSE:** Upon successful completion of this course, the student will be prepared to enroll in MATH 180, College Algebra and other higher level math courses. After this course, the student will have a basic understanding of the following algebra concepts:

1. Multiplying and dividing monomials and simplifying expressions.
2. Using scientific notation.
3. Multiplying and dividing polynomials.
4. Adding, subtracting, multiplying, dividing and simplifying rational numbers.
5. Solving and simplifying complex fractions.
6. Adding, subtracting, multiplying, dividing and simplifying complex numbers.
7. Working with radical and exponential expressions.
8. Solving quadratic equations.
9. Graphing and evaluating functions and relations.

**LEARNING OUTCOMES (COMPETENCIES):**

Upon successful completion the student will be able to:

1. display, analyze, and interpret data.
  - a. Discriminate among different type of data displays for the most effective presentation.
  - b. Draw conclusions from the data presented.
  - c. Analyze the implication of the conclusion to real life situations.
2. demonstrate knowledge of problem-solving strategies.

- a. For a given problem, gather and organize relevant information.
  - b. Choose an effective strategy to solve the problem.
  - c. Express and reflect on the reasonableness of the solution to the problem.
3. construct valid mathematical explanations.
    - a. Use mathematics to model and explain real life problems.
  4. display an understanding of the development of mathematics.
    - a. Recognize that math has evolved over centuries and that our current body of knowledge has been built upon contributions of many people and cultures over time.
  5. demonstrate an appreciation for the extent, application and beauty of mathematics.
    - a. Recognize the inherent value of mathematical concepts, their connection to structures in nature, and their implications for everyday life.

#### **METHODS OF MEASURING LEARNING OUTCOMES:**

Math Problems must be written out and fully completed. Partial credit may be given at the discretion of the instructor. The final grade in this course was based on average grades in the following areas:

1. Homework/Assignments
2. Examinations
3. Class Participation and Attitude

#### **SUMMARY OF RESULTS**

The following table displays the class outcomes for the stated learning competencies.

	Mastered	Exceeded	Met	Somewhat Met	Did Not Meet
Competency 1	2	1	3	1	0
Competency 2	2	1	4	0	0
Competency 3	2	1	3	1	0
Competency 4	1	2	2	2	0
Competency 5	1	2	2	2	0

The following table displays the learning outcomes per student for the stated competencies.

	Mastered	Exceeded	Met	Somewhat Met	Did Not Meet
Student 1	5	0	0	0	0
Student 2	3	2	0	0	0



Student 3	0	5	0	0	0
Student 4	0	0	5	0	0
Student 5	0	0	4	1	0
Student 6	0	0	3	2	0
Student 7	0	0	2	3	0

### **SUMMARY CONCLUSIONS**

Although the students who were present and participated daily, scored higher on the quizzes and exams, the students who cared about their grades worked harder to understand and learn the concepts being taught. Some students went above and beyond, while others did the minimum to get an A.

### **EXAMPLES OF THE USE OF ASSESSMENT DATA FOR COURSE DELIVERY IMPROVEMENTS**

The following describes the proposed changes to the course teachings based on the assessment:

- More problems on real life situations since much of what is taught is also taught in high school
- Require a class project based on the concepts to see how the concepts can apply to real life

# **General Agriculture Summary Assessment Report HRTC 122 Plant Propagation**

Prepared by Patricia Segura

## **PURPOSE**

The purpose of this report is to assess student learning in Plant Propagation based on student performance throughout the semester. The focus of the report is on how the outcomes of the assessments conducted during the delivery of the course are and can be used to inform decisions on modifications to course content, emphasis, assessment and teaching methodologies.

## **BACKGROUND**

The General Agriculture Program is new at Luna Community College (LCC). At West Las Vegas High School, Horticulture classes have been offered once a year for the last four years. Each year, more and more students have signed up to take these courses which by the way are concurrent enrollment classes at LCC. At the end of last year, my students who were mostly juniors wanted me to offer another class for their senior year so that they could continue working with plants. This is the first year that I offered Plant Propagation, with approximately 20 students signing up for the course. The goal is to have my high school students continue in the agriculture program at LCC. Also, next semester, I will be offering for the first time two classes of HRTC 105 Garden Maintenance and Design with approximately 60 students signed up.

As described in the LCC 2012-2015 Catalog: Plant Propagation will cover the fundamentals of plant production with the emphasis on techniques to increase the stock of plants. Plant production topics included grafting, layering, root cutting, and hybridization. Three days of lab a week were included to give the student hands-on experience at the old LCC greenhouse.

## **LEARNING OUTCOMES**

Upon successful completion the student will be able to:

1. Propagate plant materials using various sexual and asexual propagation techniques.
2. Discuss the biology of plant propagation.
3. Demonstrate knowledge of the importance and application of plant propagation method in a greenhouse setting.
4. Conduct greenhouse operations including monitoring climate controls, irrigation, and pests and ordering and stocking plants and supplies.

## **ASSESSMENT METHODS**

- 1) Completion of 4 class projects
- 2) Performance during all class work sessions
- 3) Participation at local farmer's market.

## SUMMARY OF RESULTS

The following table displays the class outcomes for the stated learning competencies.

	Mastered	Exceeded	Met	Somewhat Met	Did Not Meet
Competency 1	5	2	7	3	0
Competency 2	5	2	6	6	0
Competency 3	5	4	4	9	0
Competency 4	5	1	3	5	1

The following table displays the learning outcomes per student for the stated competencies.

	Mastered	Exceeded	Met	Somewhat Met	Did Not Meet
Student 1	0	2	2	0	0
Student 2	0	0	4	0	0
Student 3	0	0	2	2	0
Student 4	0	0	3	1	0
Student 5	0	0	4	0	0
Student 6	4	0	0	0	0
Student 7	0	0	2	2	0
Student 8	5	0	0	0	0
Student 9	0	0	0	3	1
Student 10	0	4	0	0	0
Student 11	4	0	0	0	0
Student 12	0	0	2	2	0
Student 13	0	0	4	0	0

Student 14	4	0	0	0	0
Student 15	0	0	2	2	0
Student 16	4	0	0	0	0

### **SUMMARY CONCLUSIONS**

Students with the highest level of attendance and participation on average scored higher in terms of mastery for each competency. Also, students who dedicated more time to their projects generally did better than those who did not. Overall, those students who had successfully completed the first course in the spring 2012 came into this class better prepared to work with the plants than those who did not.

### **EXAMPLES OF THE USE OF ASSESSMENT DATA FOR COURSE DELIVERY IMPROVEMENTS**

The following describe the proposed changes to the course teachings based on the assessment:

- Require that all students take HTRC 105 before taking this course.
- Require students to take Biology II prior to these classes.
- Require maximum attendance and participation
- Overall, the success of this class depends on having the right materials to properly do hands on labs.

### **MUST HAVES TO MAKE THE CLASS A SUCCESS:**

The following are needs that need to take place in order for the class to run smoothly:

- The heaters at the LCC greenhouse need to be hooked up to the thermostat that is in place. Temperatures have fallen below 25 degrees causing frost damage on their experiments.
- The water needs to be turned on inside the greenhouse to eliminate the need to hook up three hoses to reach the nearest tap which is in front of the building.
- Eventually the plastic glazing needs to be replaced to allow maximum sunlight in the greenhouse.