ASSESSMENT REPORT
CENTRAL NEW MEXICO COMMUNITY COLLEGE

The purpose of this form is to provide a written summary of your assessment results for the current assessment cycle.

Fall 2011-Spring 2012 (Assessment Period Covered)

June 15th, 2012 (Date Report Submitted)

Choose ONE of the following 3 areas for this assessment report and insert the name of the general education area, certificate, degree or discipline on the appropriate line:

See definitions for each category in Assessment Process document

Gen Ed Area (see definitions) Lab Science or **Program** _____

AA/AS ☐
AAS ☐

Certificate ☐
AA/AS ☐
AAS ☐

Or Discipline Area (see definitions) _____

Outcome(s) assessed:
GEN ED LAB SCIENCE OUTCOMES:
1.Employ critical thinking skills to judge the validity of information from a scientific perspective.
2. Apply the scientific method to formulate questions, analyze information/data and draw conclusions.
3. Properly operate laboratory equipment to collect relevant and quality data.
4. Utilize mathematical techniques to evaluate and solve scientific problems.
5. Communicate effectively about scientific ideas and topics, in both oral and written formats.
6. Relate science to personal, social or global impact.

Classes/Cohort Assessed:
BIO 1092 Biology for Non-majors Lab
BIO 2192 Microbiology Lab

Measurement tool(s):
BIO 1092 final exam F11 and SP12

BIO 2192 selected midterm exam questions SP12—This was a beta test of the assessment tool. BIO 2192 selected Microbiology Lab Unknown Identification Project sections SP12-- This was a beta test of the assessment tool.
Type of tool (for each tool listed above, indicate type of tool): All tools are direct type tools.

Achievement Target (if more than one measurement tool, list target for each tool separately):

For all tools the target is correct responses by 70% of students.

Assessment Results/Findings (if more than one measurement tool, list results for each tool separately):

2192 Assessment Results
GE1.Employ critical thinking skills to judge the validity of information from a scientific perspective.
(Midterm tool 71.9%)
GE2. Apply the scientific method to formulate questions, analyze information/data and draw conclusions
(Midterm tool, two separate questions, 82%, 70.8%).
GE3. Properly operate laboratory equipment to collect relevant and quality data.
(Midterm tool, three separate questions, 93.3%, 91%, 71.9%)
GE4. Utilize mathematical techniques to evaluate and solve scientific problems.
(Midterm tool, 67.4%)
GE5. Communicate effectively about scientific ideas and topics, in both oral and written formats. (Final report tool, 92.1%)
GE6. Relate science to personal, social or global impact.
(Final report tool, 91%)

1092 Assessment Results
GE1. Employ critical thinking skills to judge the validity of information from a scientific perspective.
(Final exam 96.7%)
GE2. Apply the scientific method to formulate questions, analyze information/data and draw conclusions.
(Final exam 75.7%)
GE4. Demonstrate problem solving skills within the context of mathematical applications.
(Final exam 69.0%)
GE6. Relate science to personal, social or global impact.
(Final exam 76.4%)

Action Plan (close the loop): NA

CENTRAL NEW MEXICO COMMUNITY COLLEGE
ASSESSMENT REPORT – Part II
Action Plan & Assessment Plan Update

The purpose of this form is to provide a written summary of your assessment action plan for the designated assessment cycle and provide an updated assessment cycle plan for the current 5-year cycle

Fall 2011-Spring 2012 (Report Period)

09/30/12 (Date Report Submitted)

Susan Johnson/sjohnson@cnm.edu/224-4000 ext 50102 (Contact Person/email/phone)

Indicate ONE of the following 3 areas for this assessment report and insert the name of the general education area, certificate, degree or discipline on the appropriate line:

See definitions for each category in Assessment Process document

Gen Ed Area (see definitions) Lab Science or **Program**

AA/AS	x	Certificate	
AAS		AA/AS	
		AAS	

Or Discipline Area (see definitions)

Data Results Period upon which this Action Plan is based (period which ended 6/30/xx): 8/29/11-6/30/12

Action Plan (close the loop):

BIO 1092 Action Plan:

Two BIO 1092 lab experiments require students to calculate % change. This calculation will be demonstrated and emphasized during intro to these labs. Students will be quizzed on this calculation more than once. This action plan will be communicated to all BIO 1092 instructors by the BIO 1092 course coordinator.

GEN ED 3 “Operate laboratory equipment” is not currently being assessed. The full-time instructors will work together to develop an activity that employs measuring equipment that is available both DL and face-to-face formats of the course.

GEN ED 5 “Communicate effectively about scientific ideas and topics, in both oral and written formats” is not currently being assessed. The full-time instructors will work together to create an activity that involves a short written report (perhaps a report on the media clips).

BIO 2192 Action Plan:
Slightly alter the midterm assessment tool in order to have a better idea of where/if student math weakness lies.

Currently the question reads:
2. Perform a gram stain on your bacteria.
a.) Is your species Gram(+) or Gram(-)? 2 pts

b.) What is the shape/morphology and arrangement of your organism? 1 pt
(Leave your Gram stain slide on your microscope for your instructor to look at.)

c.) Estimate the approximate size of your organism. 1 pt
Show your calculations in the space below:

For the Fall 2012 assessment we'd like to alter the question so that 2c is broken into 4 separate parts and is worth a total of 2 points (each part being worth a 1/2 point) and drop question 2a from 2 points to 1 point. The future question would read something like:

2. Perform a gram stain on your bacteria.
a.) Is your species Gram(+) or Gram(-)? 1 pt

b.) What is the shape/morphology and arrangement of your organism? 1 pt
(Leave your Gram stain slide on your microscope for your instructor to check.)

c.) Instructor discretionary points for technique

d.) Determine the field size (1/2 point) at 1000 TM. ½ pt

e.) Write down the formula for estimating cell size. ½ pt
f.) Estimate the approximate size of your organism in mm. ½ pt

g.) Express the approximate size of your organism in um. ½ pt

ASSESSEMENT PLAN

The assessment plan includes three parts:

1. **The plan description (T**his should be a brief written description of the assessment plan(s) for the area/certificate/degree/discipline. If all outcomes are not shown in item #3 below as assessed in the 5 year cycle, this description must include information about their eventual assessment
2. **The student learning outcomes for the area/program/discipline** for the 5 year cycle.
3. **The assessment cycle timeline**

1 Plan Description
In BIO 1092 GEN ED outcomes are assessed by a question set that is part of the final exam for the course.
In BIO 2192 GEN ED outcomes are assessed by a question set that is part of the midterm exam and by a question set that is part of the Unknown Bacterial Identification Activity.

2 Provide the list of current student learning outcomes for this area or program (you may add more lines if necessary by right clicking and choosing insert row below):

1	Employ critical thinking skills to judge the validity of information from a scientific perspective.
2	Apply the scientific method to formulate questions, analyze information/data and draw conclusions.
3	Properly operate laboratory equipment to collect relevant and quality data.
4	Utilize mathematical techniques to evaluate and solve scientific problems.
5	Communicate effectively about scientific ideas and topics, in both oral and written formats.
6	Relate science to personal, social or global impact.
7	
8	
9	
10	

3 Assessment Cycle timeline for the above student learning outcomes for the next five years.

Outcome #	When Measured	Where measured (i.e. what course(s))	Measurement tool(s) & Type of tool
1	Every term	BIO 1092 and BIO 2192	Final exam for BIO 1092; Midterm exam and student project for BIO 2192
2	Every term	BIO 1092 and BIO 2192	Final exam for BIO 1092; Midterm exam and student project for BIO 2192
3	Every term	BIO 2192	Midterm exam and student project for BIO 2192
4	Every term	BIO 1092 and BIO 2192	Final exam for BIO 0192; Midterm exam and student project for BIO 2192
5	Every term	BIO 2192	Midterm exam and student project for BIO 2192
6	Every term	BIO 1092 and BIO 2192	Final exam for BIO 1092; Midterm exam and student project for BIO 2192
7	Every term	BIO 1092 and BIO 2192	Final exam for BIO 1092; Midterm exam and student project for BIO 2192
8	Every term	BIO 1092 and BIO 2192	Final exam for BIO 1092; Midterm exam and student project for BIO 2192
9	Every term	BIO 1092 and BIO 2192	Final exam for BIO 1092; Midterm exam and student project for BIO 2192
10	Every term	BIO 1092 and BIO 2192	Final exam for BIO 1092; Midterm exam and student project for BIO 2192