

**CENTRAL NEW MEXICO COMMUNITY COLLEGE
ASSESSMENT CYCLE PLAN**

Due to SAAC by October 15 following new program approval or at the end of the prior cycle plan

Cycle Plan Years and Contact Information:			
<u>2015 - 2020</u>	<u>Phil Lister</u>	<u>plister@cnm.edu</u>	<u>50325</u>
Cycle Years	Contact Person	Email	Phone Number

Subject of the Assessment:		
Program: <u>Biology</u>	Gen Ed Area: <u>Science</u>	Discipline Area:
<input type="checkbox"/> Certificate <input type="checkbox"/> AA <input checked="" type="checkbox"/> AS <input type="checkbox"/> AAS	Applicable to: <input checked="" type="checkbox"/> AA/AS <input type="checkbox"/> AAS	<u>Laboratory Science</u>

Plan Description:
<p>A new cycle plan for the Biology degree was developed and will be initialized in the Fall 2015 term. This new plan represents a more concerted effort to create a crosswalk between degree outcomes and CNM and State General Education outcomes. It also develops specific assessment tools that will be used in the Biology majors courses across multiple terms and sections. The current curriculum does not adequately address one of the General Education outcomes stipulated by both CNM and the NM Higher Education Department: "Properly operate lab equipment to collect relevant and quality data". We will examine the curriculum to see where it may be modified to include this outcome.</p>

Critical Thinking and Life Skills/Teamwork Development within Programs:
a) Please describe how Critical Thinking assessment is embedded within your program assessment. b) Please describe how Life Skills/Teamwork assessment is embedded within your program assessment.
a) Critical thinking skills are embedded in degree outcomes #1, 2, 3, 4, 5, and 8
b) Life skills/Teamwork skills are embedded in degree outcomes # 6 and 7

Student Learning Outcomes:	When Measured:	Where Measured:	How Measured:
1. Explain the significance and central importance of metabolic pathways in cellular function	Fall (Odd years) Summer (Even years)	Bio 1510/1592 Bio 1610/1692	Specific questions on exams

2. Apply the scientific method to formulate questions, analyze information/data and draw conclusions (Links to CNM General Education (CNMGE) Area III outcomes #1 and 2; links to New Mexico Higher Education Department (NMHED) Lab Science Area outcomes #1 and 2)	Spring 2016/2018 Spring 2017/2019 Fall 2017/2020	Biology 1510/1592 Biology 1610/1692 Biology 2410	Worksheet on <i>Thermophilus</i> Okazaki/DNA Regulation Worksheet Project: Attitudes Toward Evolution
3. Identify and use mathematical methods to model biological systems (Links to CNMGE Area III outcome #4; NMHED Lab Science Area outcome #4)	Summer 2017 Fall 2019 Fall 2015	Biology 1610 Biology 2492 Biology 2410	Okazaki/DNA Regulation Worksheet Biology Online Lab: Population Ecology Project: Attitudes Toward Evolution
4. Integrate concepts drawn from cellular and organismal biology with evolutionary adaptations	Spring 2016/2018 Spring 2017/Summer 2019	Biology 1510 Biology 2510	Worksheet on <i>Thermophilus</i> ???????
5. Model ecological patterns (Links to NMHED Lab Science Area outcome #5)	Spring 2016/2018 Fall 2017/2020	Biology 1510 Biology 2492	Worksheet on <i>Thermophilus</i> Biology Online Lab: Population Ecology
6. Communicate effectively (Links to CNMGE Area III outcome #5; NMHED Lab Science Area outcome #3)	Spring 2016/2018 Spring 2017 Fall 2015 Fall 2020 Spring or Summer 2019	Biology 1510 Biology 1610 Biology 2410 Biology 2492 Biology 2510	Worksheet on <i>Thermophilus</i> Okazaki/DNA Regulation Worksheet Project: Attitudes Toward Evolution Biology Online Lab: Population Ecology ???????
7. Collaborate with peers to accomplish tasks	Spring 2016/Spring 2018 Spring 2017 Fall 2015 Fall 2020 Spring or Summer 2019	Biology 1510 Biology 1610 Biology 2410 Biology 2492 Biology 2510	Worksheet on <i>Thermophilus</i> Okazaki/DNA Regulation Worksheet Project: Attitudes Toward Evolution Biology Online Lab: Population Ecology ???????
8. Relate science to personal, social or global impact (Links to CNMGE Area III outcome #6; NMHED Lab Science Area #5)	Fall 2015/2019 Summer 2017	Biology 2410 Biology 2510	Project: Attitudes Toward Evolution ???????????

9. Orphan General Education Outcome: Properly operate lab equipment to collect relevant and quality data (CNMGE Area III outcome #3; NMHED Lab Science Area outcome #2.		Not Currently Covered	
10.			