



Continuous Improvement Plan (CIP) Documentation 2013 - 2017

Date: 9-26-2015 **Name of Administrative or Educational Support Unit:** Biotechnology-Cert

Contact name: Bridgette Kirkpatrick **Contact email:** bkirkpatrick@collin.edu **Contact phone:** 972-578-5513 **Office Location:** SCC-I208

Mission:

Collin's Biotechnology Program prepares students for entry level positions in biological research and industrial laboratories. Returning students can also benefit from the new methods and technologies related to agriculture, medicine, pharmaceuticals, and other applications.

PART I: Might not change from year to year

A. Outcomes(s) Results expected in this department/program	B. Measure(s) The instrument or process used to measure results	C. Target(s) The level of success expected
1. Demonstrate best practices and procedures for biological or industrial laboratory setting.	Capstone Lab Skills Checklist	75%
2. Appropriately apply basic science in the conduct of laboratory applications.	Capstone Lab Exercises	75%
3. Demonstrate cell culture techniques with a variety of cells and media.	Capstone Lab Skills Checklist, cell culture section	P/F
4. Given varied scenarios, including an internship, make ethical and professional choices.	Capstone Final Exam, Professionalism section and Co-op Evaluation rating, Professionalism item	75% Satisfactory or higher
5. Create or renew articulation agreements with at least 5 institutions	Completed agreements	5 agreements

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REV. 10-05-2017

CIP Outcomes, Measures & Targets Table

A. Expected Outcome(s) 2018-19 Results expected in this program/department	B. Measure(s)	C. Target(s) Level of success expected
Demonstrate best practices and procedures for biological or industrial laboratory setting.	Capstone Lab Skills Checklist	75%
Appropriately apply basic science in the conduct of laboratory applications	Capstone Lab Exercises	75%
Demonstrate cell culture techniques with a variety of cells and media.	Capstone Lab Skills Checklist, cell culture section	P/F
Increase the number of certificate completers.	Level I certificate/advanced certificate are stackable credentials	25%
Increase program visibility through website and advising.	Increased enrollment in courses and utilization of the website visitation.	25% over current



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PART II: For academic year 2015-16

(enter year i.e. 2011-12)

<p style="text-align: center;">A. Outcomes(s)</p> <p style="text-align: center;">Results expected in this department/program</p>	<p style="text-align: center;">D. Action Plan Years 5 & 2</p> <p>Based on analysis of previous assessment, create an action plan and include it here in the row of the outcomes(s) it addresses.</p>	<p style="text-align: center;">E. Implement Action Plan Years 1 & 3</p> <p>Implement the action plan and collect data</p>	<p style="text-align: center;">F. Data Results Summary Years 2 & 4</p> <p>Summarize the data collected</p>	<p style="text-align: center;">G. Findings Years 2 & 4</p> <p>What does data say about outcome?</p>
<p>1 Demonstrate best practices and procedures for biological or industrial laboratory setting.</p>	<p>Apply capstone skills checklist</p>			
<p>2 Appropriately apply basic science in the conduct of laboratory applications</p>	<p>Conduct capstone lab exercises</p>		<p>Need to tailor content toward what they will be doing in the internships—lab math and QC are lacking</p>	<p>Increase lab math content in all biotech courses—integrate into each course from beginning to end of program</p>
<p>3 Demonstrate cell culture techniques with a variety of cells and media.</p>	<p>Complete skills checklist from course</p>		<p>86% of students made a B or better on the practical exam</p>	
<p>4 Given varied scenarios, including an internship, make ethical and professional choices.</p>	<p>Collect capstone reviews</p>		<p>Need to tailor content toward what they will be doing in the internships—knowledge of QC is lacking</p>	<p>Offer/require quality control course in curriculum to ensure students are updated on QC requirements in industry</p>
<p>5 Create or renew articulation agreements with at least 5 institutions</p>	<p>Use NSF grant release time and contacts to create multi-institution agreements</p>			<p>Current unsigned or out of date articulations will be updated and/or renewed</p>