

# Program Assessment

2019-2020

## Agriculture and Biological Sciences

Biology/Zoology - Pre-Pharmacy Option	
Date	Click or tap to enter a date.
Competency # and Description	1. Demonstrate knowledge of the levels of structural and functional relationships from atoms to organ systems.
Course	BISI 2104 – Human Anatomy BISI 2124 - Microbiology
Activity	BISI 2104 - Exams BISI 2124 - Exams
Measurement (attached copy of instrument with point distribution)	BISI 2104 - Exams BISI 2124 - Exams
Evaluation Criteria	Pass rate of 70% on each activity
2015-2016 Results	BISI 2104 25 out of 35 – 71.4% BISI 2124 46 out of 64 – 71.9%
2016-2017 Results	BISI 2104 28 out of 35 – 80.0% BISI 2124 36 out of 58 – 62.1%
2017-2018 Results	BISI 2104 51 out of 82 – 62.2% BISI 2124 28 out of 47 – 59.6%
2018-2019 Results	BISI 2104 28/43 – 65.1% BISI 2124 32/58 – 55.2%
2019-2020 Results	
Summary of changes for 2018-2019	No changes for the next year. Since averages of both courses dropped this year compared to the last two, assessment needs to continue this year to assess trends.
Recommendation for changes for 2019-2020	Data to be assessed in Fall with faculty.
Recommendation for changes for 2020-2021	
Timeline for Review	Fall/spring data will be collected in the spring and reviewed at the beginning of the fall semester. Instructors from all campuses will determine needed adjustments.
Date	Click or tap to enter a date.

Competency # and Description	2. Demonstrate effective implementation of the scientific method and written and oral expression of scientific concepts and analysis of data.
Course	BISI 2124 - Microbiology CHEM 1414 – General Chemistry II PHYS 1114 – General Physics I
Activity	BISI 2124 – Quizzes, exams, labs, paper CHEM 1414 - Lab PHYS 1114 – Quiz, Lab
Measurement (attached copy of instrument with point distribution)	BISI 2124 – Quizzes, exams, labs, paper CHEM 1414 - Lab PHYS 1114 – Quiz, lab
Evaluation Criteria	70% pass rate on exam
2015-2016 Results	BISI 2124 50 out of 60 – 8.3% CHEM 1414 46 out of 46 – 100% PHYS 1114 63 out of 72 – 87.5%
2016-2017 Results	BISI 2124 54 out of 59 – 91.5% CHEM 1414 46 out of 53 – 86.8% PHYS 1114 57 out of 63 – 90.5%
2017-2018 Results	BISI 2124 41 out of 43 – 95.3% CHEM 1414 50 out of 53 – 94.3% PHYS 1114 25 out of 28 – 89.3%
2018-2019 Results	BISI 2124 53/58 – 91.4% CHEM 1414 47/47 – 100.0% PHYS 1114 38/51 – 74.5%
2019-2020 Results	
Summary of changes for 2018-2019	Develop a common rubric for use by all courses for use when grading lab reports for this assessment.
Recommendation for changes for 2019-2020	Data to be assessed in Fall with faculty.
Recommendation for changes for 2020-2021	
Timeline for Review	Fall/spring data will be collected and reviewed in the spring and instructors from all campuses will determine needed adjustments.
Date	Click or tap to enter a date.
Competency # and Description	3. Demonstrate the concepts of equilibrium and energy transfer.
Course	BISI 2124 - Microbiology CHEM 1414 – General Chemistry II PHYS 1114 – General Physics I
Activity	BISI 2124 – Quizzes, exams, worksheets CHEM 1414 – Quiz, exam PHYS 1114 – Quiz, exam

Measurement (attached copy of instrument with point distribution)	BISI 2124 – Quizzes, exams, worksheets CHEM 1414 – Quiz, exam PHYS 1114 – Quiz, exam
Evaluation Criteria	70% pass rate on activity
2015-2016 Results	BISI 2124 49 out of 64 – 76.6% CHEM 1414 32 out of 45 – 66.7% PHYS 1114 54 out of 66 – 81.8%
2016-2017 Results	BISI 2124 19 out of 32- 64.3% CHEM 1414 46 out of 53 - 86.8% PHYS 1114 57 out of 63 – 90.5%
2017-2018 Results	BISI 2124 27 out of 43 – 62.8% CHEM 1414 43 out of 53 – 81.1% PHYS 1114 16 out of 19 – 84.2%
2018-2019 Results	BISI 2124 34/58 – 58.6% CHEM 1414 43/47 – 91.5% PHYS 1114 38/51 – 74.5%
2019-2020 Results	
Summary of changes for 2018-2019	No changes for the next year.
Recommendation for changes for 2019-2020	Data to be assessed in Fall with faculty.
Recommendation for changes for 2020-2021	
Timeline for Review	Fall/spring data will be collected and reviewed in the spring and instructors from all campuses will determine needed adjustments.
Date	Click or tap to enter a date.
Competency # and Description	4. Use and apply physical data to solve problems
Course	MATH 2103 – Elementary Calculus
Activity	Exam/quiz
Measurement (attached copy of instrument with point distribution)	Exam/quiz graded with a rubric created for this assignment.
Evaluation Criteria	70% pass rate on activity
2015-2016 Results	Data not collected.

2016-2017 Results	MATH 2103 - 12 out of 15 – 80.0%
2017-2018 Results	MATH 2103 – 8/10 (80%) of students met competency
2018-2019 Results	MATH 2103 – 12/16 (75%)
2019-2020 Results	
Summary of changes for 2018-2019	MATH 2103 – no changes since first semester assessed
Recommendation for changes for 2019-2020	Data to be assessed in Fall with faculty.
Recommendation for changes for 2020-2021	
Timeline for Review	Fall/spring data will be collected and reviewed in the spring and instructors from all campuses will determine needed adjustments.

Summary of Program and Divisional Changes	
2016-2017	<ul style="list-style-type: none"> <li>• Changed program requirement of MATH 2145 Calc I to MATH 2103 Elem Calc to meet requirement at transfer institutions.</li> <li>• Increased CHEM 1414 offerings in Enid.</li> <li>• Added onsite offering of HLST 1113 (Tonkawa)</li> <li>• Added additional summer course offerings of CHEM 1314 and BISI 2214 (Tonkawa).</li> <li>• Increase internship opportunities within the discipline area.</li> </ul>
2017-2018	<ul style="list-style-type: none"> <li>• Added sections of BISI 2104 and BISI 2204 in Stillwater to accommodate nursing and radiology students.</li> <li>• Purchased A&amp;P lab models and Physiology computer interfaces for Stillwater lab sections.</li> <li>• Added additional online summer course offerings of BISI 1114 and HLST 1113 1314</li> </ul>
2018-2019	<ul style="list-style-type: none"> <li>• Added fall offering of BISI 2104 and spring offering of BISI 2204 in Stillwater</li> <li>• Increased online course offerings for BISI 1114, BISI 2204 and BISI 1214 for fall and spring semesters</li> <li>• Increased summer online course offerings for NUTR 2123</li> <li>• Increased online offerings of HLST 1113 for summer and fall</li> <li>• Added evening course offerings for BISI 2124 and BISI 2214 in Tonkawa</li> <li>• Added a 16-week and an 8-week hybrid section of BISI 1114 and corresponding lab sections in Stillwater</li> <li>• Added the "Introduction to Scientific Research" course offering for spring semester in Tonkawa</li> </ul>
2019-2020	<ul style="list-style-type: none"> <li>•</li> </ul>

Recommendations for Program Changes	
2017-2018	<ul style="list-style-type: none"> <li>Evaluate enrollment number for BISI 1124, BISI 2104 and BISI 2204 for needs of additional sections.</li> </ul>
2018-2019	<ul style="list-style-type: none"> <li>Collect data of program classes in the fall if that is the only time they are taught on the campus.</li> <li>Incorporate an "overall" average for each competency for comparison back to yearly averages.</li> <li>Report data for BISI students only for CHEM 1414, PHYS 1114, and MATH 2103..</li> </ul>
2019-2020	Data to be assessed in Fall with faculty.
2020-2021	

### Ag, Science, & Engineering

Program Level Outcomes Timeline						
Program Objectives – Pre-Pharmacy Option	Course Map	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
1. Demonstrate knowledge of the levels of structural and functional relationships from atoms to organ systems	BISI 2104 BISI 2124	X	X	X	X	X
2. Demonstrate effective implementation of the scientific method and written and oral expression of scientific concepts and analysis of data.	BISI 2124 CHEM 1414 PHYS 1114	X	X	X	X	X
3. Demonstrate the concepts of equilibrium and energy transfer.	BISI 2124 CHEM 1414 PHYS 1114	X	X	X	X	X
4. Use and apply physical data to solve problems	MATH 2103	X	X	X	X	X