Year	2021-22
Course number and Name:	BIOL 2401 – Anatomy and Physiology I
Component area:	030-Life and Physical Science
Number of sections offered:	Fall – 2 Sections; Spring – 1 Section
Number of students enrolled:	335
Contact Person (include email & Phone#)	Matthew Pyne; Ian Lian

#### **Summary of Continuous Improvement Efforts since Last Report**

Provide a brief description of how assessment results have been used for core course improvement. Point to a specific example of how an assessment provided the department with data it could use for improvement and what that improvement was, if possible, also show evidence of the improvement. You may look at data from the two previous academic years to support this case.

#### Respond here:

Targets tied to critical thinking learning outcomes were not met in the 2020-2021 cycle. Action plans based on these findings including new instructional content, methodologies, modalities of delivery, and use of formative assessment were developed and implemented in the 2021-2022 cycle, with targets met all associated outcomes.

### **Course highlights Since Last Report**

Identify and briefly discuss any changes made to the course since the last report.

#### Respond here:

Activities were added into lectures to encourage students to ask more in-depth questions pertaining to processes occurring within the body, such as muscle contraction. Students were then asked to analyze these questions in small groups and provide explanations. Questions were then discussed within the class as a whole to ensure all students understood the problem-solving techniques used to fully answer the questions. The clarity of wording on examination questions was revised to promote student comprehension.

Table 1. Assessment Results and Analysis for Current Cycle

Stage 1: PLAN		STAGE 2: DO		Stage 3: STUDY		
General	Assessment	Proficiency – e.g.	Benchmark – e.g.	Results of course	Analysis of	Recommendations
Education	Method(s) – e.g.	the proficient	80% of students	assessment(s)	results – e.g.	for Course based
Competencies	pre/post tests,	student will	taking the final		strengths and	on assessment
Addressed in this	embedded	correctly answer	exam will		weaknesses	
Course:	questions,	5 out of the 6	correctly answer		What does this	
	portfolio	embedded	5 of the 6		data tell you?	
	evaluation,	questions on the	embedded		How will you use	
	rubric-scored	final exam	questions on the		this data? How	
	essay; list only		final exam		were data from	
	activities for				the last cycle	
	which you are				used to make	
	reporting				changes during	
	assessment data				this cycle, and	
					what were the	
					results of those	
					changes?	
Communication	Rubric-graded	Students will	Student groups	Target Met	Students scored a	Increase the target
(required)	student activity	work in groups to	will score an		combined	threshold to an
		complete a model	average of 3 on		average of 3.8 for	average of 3.5 on
		of DNA	the evaluation		the questions	the evaluation
		replication. They	rubric. This		pertaining to	rubric. This
		will work	represents		outcome 6.	represents
		cooperatively to	adequate work.		Averages for each	adequate work.
		both complete			individual	
		the model and to			evaluated	
		help all group			question were as	
		members fully understand the			follows:	
					Were students	
		material. Each group will be			able to cooperate	
					to complete the	
		asked to explain			assignment? 3.9	
		the process used				

		to complete the exercise when they are done.			Were the students able to adequately explain the process they were completing? 3.2 Were students able to learn cooperatively in a group? 3.8 Were students able to stay on task? 4.0	
Critical Thinking (required)	Students will answer questions embedded in multiple-choice exams.	Students will identify structures in the hierarchical organization of the human body.	Students will average at least 65% correct on embedded multiple-choice questions.	Target Met	Students scored a combined average of 66.6% for the questions pertaining to outcome 1. Which structure of a hair follicle includes dividing stem cells? 65% What is the term for an epithelium consisting of multiple cell layers? 85.3% The tough superficial layer of the epidermis is known as the stratum: 58.8%	Increase target threshold to 70% or higher on the rubric evaluation pertaining to outcome.

Select One:Empirical & Quantitative SkillsTeamworkSocial responsibilityPersonal Responsibility	Rubric-graded student activity	Students will work in groups to complete a model of DNA replication. They will work cooperatively to both complete the model and to help all group members fully understand the material. Each group will be asked to explain the process used to complete the exercise when they are done.	Student groups will score an average of 3 on the evaluation rubric. This represents adequate work.	Target Met	The epithelia that lines body cavities and blood vessels are classified as: 74.8% What is the organizing unit of compact bone tissue: 74.8% Students scored a combined average of 3.8 for the questions pertaining to outcome 6. Averages for each individual evaluated question were as follows:	Student groups will score an average of 3 on the evaluation rubric. This represents adequate work.
Select One:Empirical & Quantitative SkillsTeamwork						
Social responsibility						

Personal			
Responsibility			

Table 2. Continuous Improvement Results Since Last Report

STAGE 4: ACT		
Actions/Goals based on data	Status	Discussion of status
results	C=Complete	If C, describe efforts that led to accomplishment of actions/goals
*copy last cycles actions/goals and report on progress toward continuous improvement on those here	P=Progressing N=No action taken	If P, provide update on progress made toward accomplishing actions/goals and what tasks remain  If N, discuss why action toward accomplishing actions/goals has been delayed and what work will be initiated toward accomplishment.
Increase target thresholds for SLOs.	P	Collect assessment data in light of new thresholds.