Tuning in to a Clearer Vision of General Education

UNIVERSITY OF TENNESSEE AT MARTIN

PATTY FLOWERS, ASSESSMENT COORDINATOR

STEPHANIE KOLITSCH, DIRECTOR OF ACCREDITATION, SACSCOC LIAISON, AND INTERIM DIRECTOR OF INSTITUTIONAL RESEARCH

Session outcomes

Participants will:

- gain access to modifiable forms they can use to organize general education assessment.
- gain knowledge and insights into the replicable processes used at UT Martin to assess general education.

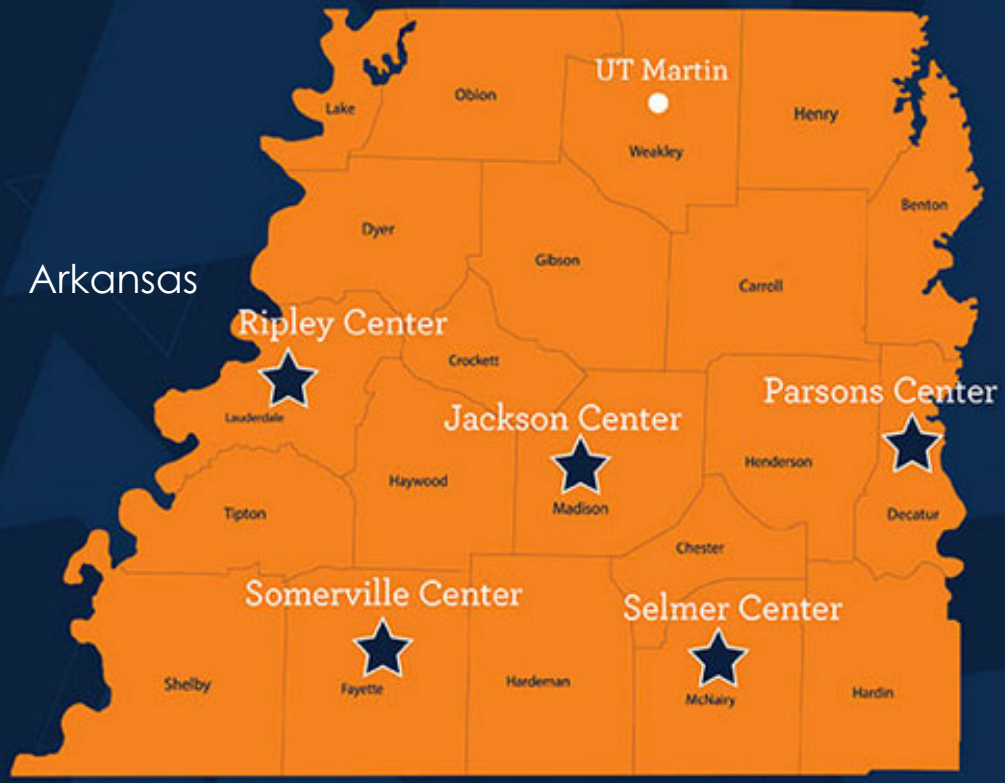
The University of Tennessee at Martin

- Located in rural northwest Tennessee, approximately 125 miles northeast of Memphis and 150 miles northwest of Nashville
- One of the campuses of the University of Tennessee system
- Approximately 7,100 students represent 44 states and 21 countries
- Offers 18 undergraduate degree programs representing more than 100 academic areas of study
- Five graduate degrees with 17 specialized concentrations, with two additional programs coming soon

Missouri

Kentucky

Arkansas



COME FLY WITH US!

WEST TENNESSEE IS OUR CAMPUS

UT MARTIN CENTERS

Mississippi

Alabama

UT Martin Accolades

- The Princeton Review has named UT Martin a "Best College in the Southeast" for 17 consecutive years.
- U.S. News & World Report has ranked UT Martin as tied for 12th among top regional public institutions in the south.
- UT Martin students' satisfaction with their entire educational experience ranked first in the latest survey information among Tennessee public universities.
- UT Martin's Nursing program routinely posts a 100% pass rate on the NCLEX Licensure exam.
- UT Martin's College of Agriculture and Natural Sciences was recently ranked #1 in Tennessee, #43 nationwide.

General Education at UT Martin

- Overseen by the Faculty Senate Committee on Instruction
- Organized into six areas
  - Biological and Physical Systems
  - Communications
  - Fine Arts
  - Humanities
  - Mathematics
  - Social and Behavioral Sciences
  - Total of 38-39 hours of General Education required

SLOs for Biological and Physical Systems 8 Hours

- The goals of this requirement are to enable students to be informed citizens and develop processes of critical thinking; to help students: 1) actively explore and understand the basic concepts and nature of scientific knowledge, and 2) develop scientific reasoning as a critical component in the process of problem solving.
- **Students will demonstrate an understanding of the basic concepts in a discipline of science.**
- **Students will demonstrate any or all of the following: the application of the scientific method, laboratory techniques, and/or data analysis for reasoning and problem solving.**

- 20 courses, including Biology, Chemistry, Physics, Astronomy, Geology, Anatomy and Physiology

SLOs for Communications 9-10 hours

- The purpose of the Communications requirement is to prepare students to communicate information, thoughts, and viewpoints effectively through oral and written forms of expression.
- **Students will evaluate oral and/or written expressions by listening and reading critically for elements that reflect situation, audience, purpose, and diverse points of view.**
- **Students will organize research to develop logical discourse in support of a central idea.**
- **Students will develop written and/or oral presentations employing correct diction, syntax, grammar, and mechanics.**
- **Students will demonstrate critical thinking skills through the appropriate use of opinions, facts, and inferences in rhetorical strategies.**
- 6 courses, including English Composition and Public Speaking

SLOs for Fine Arts
3 Hours

- The purpose of this requirement is to expose students to the fine arts in a broad societal and cultural context. These core courses encourage students to discover and develop an awareness, emotional response, and intellectual understanding of the fine arts in our Western and global communities.

- **Students will interpret the meaning of art within its context.**
- **Students will develop a personal aesthetic response.**
- **Students will analyze the relevance of art in a global society.**

- 11 courses in Art, Dance, Music, and Theater

SLOs for Humanities
9 Hours

- Studying the Humanities develops responsible citizens by teaching students to recognize, interpret, and evaluate human action, thought, and expression. Courses in this area allow students to compare their thinking with that of persons from other regions and times, thus enabling them better to understand themselves, their society, and their world.

- **Students will analyze major primary sources of the humanities.**
- **Students will examine the diversity of human experience in various humanistic media.**
- **Students will recognize the continuity and change within the human experience as understood in the humanities.**

- 19 courses, including English, History, Foreign Cultures, Philosophy, and Religious Studies

SLOs for Mathematics 3 Hours

- The purpose of requirement is to teach students to organize, evaluate, and solve problems using both abstract and quantitative approaches. The courses in this area enable students to communicate using the language of mathematics.

- **Students will use appropriate notation and vocabulary to communicate mathematics.**
- **Students will use symbolic and numerical methods to perform calculations.**
- **Students will solve problems with real-world applications.**

- 7 courses

Social and Behavioral Science SLOs 6 hours

The purpose of this requirement is to assist students in creative and critical examination of humans and human institutions.

- **Students will describe the influence of geographic, political, economic, cultural, and/or family institutions on the individual and society.**
- **Students will explain the connection between social/behavioral science research and everyday life.**
- **Students will analyze key ethical issues as examined by the social/behavioral sciences.**

- 20 courses, including Agriculture, Animal Science, Economics, Engineering, Geography, Health, Interdisciplinary Studies, Natural Resources Management, Nutrition, Political Science, Psychology, Social Work, and Sociology

General Education Assessments

- Courses are subject to **both** annual assessments and five-year comprehensive review.
- Annual assessments assure that courses are f
  their purpose and making improvements.
- The Five-Year Review serves as a meta-analysis and justification for a course's continued inclusion in the General Education Core curriculum.
- The Faculty Senate Committee on Instruction, with the Assessment Coordinator, review the assessment reports and provide feedback.

Completed Annual assessments

- Each Gen Ed course taught must complete an annual assessment report.
- The department that 'owns' the course is responsible.
- Annual assessments are due in October on the form provided on the Assessment website.
- Feedback is provided on the form provided on the Assessment website.
- Completed annual assessment forms and feedback are housed on a SharePoint site.

Reporting forms

https://www.utm.edu/assessment/forms.php

- General Education Core learning outcomes and courses can be found in the UT Martin Undergraduate and Graduate Catalog under the heading "General Requirements for a Bachelor's Degree."
- **Annual Assessment Report Forms**
- General Education: Biological and Physical Systems
- General Education: Communication
- General Education: Fine Arts and Aesthetics
- General Education: Humanities
- General Education: Mathematics
- General Education: Social and Behavioral Sciences
- Instructions for Completing General Education Assessment Reports
- Rubric for evaluating reports

BIOLOGICAL AND PHYSICAL SYSTEMS

Course: _____ Date: _____

Department: _____ Chair: _____

Curriculum Goals: Courses that meet the Biological and Physical Systems requirement are designed to help students: 1) actively explore and understand the basic concepts and nature of scientific knowledge, and 2) develop scientific reasoning as a critical component in the process of problem solving. The goals of this requirements are to enable students to be informed citizens and develop processes of critical thinking. *All courses in Biological and Physical Systems must measure all of these learning outcomes.*

Student Learning Outcome	Assessment Cycle	Assessment(s)	Benchmark(s)	Data Results	Decision/Improvement Made
1. Students will demonstrate an understanding of the basic concepts in a discipline of science.					
2. Students will demonstrate any or all of the following: the application of the scientific method, laboratory techniques, and/or data analysis for reasoning and problem solving.					

FINE ARTS (AESTHETICS)

Course: _____ Date: _____

Department: _____ Chair: _____

Curriculum Goals: Courses in this area are designed to expose students to the fine arts in a broad societal and cultural context. These core courses encourage students to discover and develop an awareness, emotional response, and intellectual understanding of the fine arts in our Western and global communities. *All courses in Fine Arts (Aesthetics) must measure all of these learning outcomes.*

Student Learning Outcome	Assessment Cycle	Assessment(s)	Benchmark(s)	Data Results	Decision/Improvement Made
1. Students will interpret the meaning of art within its context.					
2. Students will develop a personal aesthetic response.					
3. Students will analyze the relevance of art in a global society.					

BIOLOGICAL AND PHYSICAL SYSTEMS

Course: BIOL120—Introductory Plant and Animal Biology
Department: Biological Sciences

Date: 1 October 2018
Assessment Coordinator: Nancy Buschhaus
Department Chair: Jennifer Greenwood

Curriculum Goals: The purpose of the Biological and Physical Systems awareness requirement is to help students gain a better awareness and understanding of the natural sciences. Students will learn to analyze problems using a scientific approach and vocabulary. (2016-17 UTM Catalog)
All learning outcomes must be satisfied by any course(s) in this category.

Student Learning Outcome	Assessment Cycle	Assessment(s)	Benchmark(s)	Data Results	Decision/Improvement Made
1. employ basic scientific language and processes that distinguish between scientific and non-scientific explanations.	Every spring semester	Final exam multiple choice questions. See Appendix 1.	Average score of all students over all questions should be at least 60%.	Both on and off-campuses: n = 134 students; Question 1: 93% correct; Question 2: 81% correct; Overall: 87% correct On-campus: n = 92 students; Question 1: 90% correct; Question 2: 75% correct; Overall: 82.5% correct Off-campus: n = 42 students; Question 1: 100% correct; Question 2: 93% correct; Overall: 96.5% correct	Benchmark reached. As the General Education SLO changes for the next cycle, we will adjust our questions to effectively examine the new SLOs.

FINE ARTS (AESTHETICS)

Course: Understanding Art 110 Date: 5/28/2019

Department Chair: Visual and Theatre Arts/Cook Instructor: ECKERT/WANG

Curriculum Goals: The purpose of the Fine Arts requirement is to help students develop an understanding of and appreciation for creative processes and expression. Students will choose their fine arts experience from a variety of aesthetics survey courses. (2013-14 UTM Catalog).

All learning outcomes must be satisfied by any course(s) in this category.

Student Learning Outcome	Assessment Cycle	Assessment(s)	Benchmark(s)	Data Results	Decision/Improvement Made
1. Students will interpret the meaning of art within its context.	FALL	Art Review/Criticism writing assignment	75% of students meet or exceed standards on assessment rubric (rubric has 4 levels of performance: Exceeds Standards, Meets Standards, Below Standards, and No Standards Met	(92 of 95 students turned in the Research/Opinion paper and all were assessed. 3 Art 110 sections) 84 of 92 students met or exceeded the standard for SLO #1. (91%)	ART 110 writing assignment assessments for SLO #1 meet the benchmark. New SLOs required the VTA faculty to reflect on the effectiveness of our assessment tools. ART 110 rubric required several changes based on new SLOs. Because of the new Fine Arts Gen Ed SLOs it's difficult to make direct comparisons with 2017-18 SLO assessments
2. Students will develop a personal aesthetic response.	FALL	Art Research/Opinion Paper writing assignment	75% of students meet or exceed standards on assessment rubric (rubric has 4 levels of performance: Exceeds Standards, Meets Standards, Below Standards, and No Standards Met	(92 of 95 students turned in the Research/Opinion paper and all were assessed. 3 Art 110 sections) 83 of 92 students met or exceeded the standard for SLO #2. (90%)	ART 110 writing assignment assessments for SLO #2 meet the benchmark. New SLOs required the VTA faculty to reflect on the effectiveness of our assessment tools. ART 110 rubric required several changes based on new SLOs. Because of the new Fine Arts Gen Ed SLOs it's difficult to make direct comparisons with 2017-18 SLO assessments
3. Students will analyze the relevance of art in a global society.	FALL	Art Research/Opinion Paper writing assignment	75% of students meet or exceed standards on assessment rubric (rubric has 4 levels of performance: Exceeds Standards, Meets Standards, Below Standards, and No Standards Met	(92 of 95 students turned in the Research/Opinion paper and all were assessed. 3 Art 110 sections) 79 of 92 students met or exceeded the standard for SLO #3. (86%)	ART 110 writing assignment assessments for SLO #3 meet the benchmark. New SLOs required the VTA faculty to reflect on the effectiveness of our assessment tools. ART 110 rubric required several changes based on new SLOs. Because of the new Fine Arts Gen Ed SLOs it's difficult to make direct

RUBRIC FOR EVALUATING GENERAL EDUCATION REPORTS

Course _____

Date _____

DOES THE COURSE HAVE:	YES	NO	COMMENTS / SUGGESTIONS
Appropriate and reasonable assessments for each general education outcome?			
A reasonable benchmark for each assessment?			
A summary of the data collected for each assessment?			
Assessments, benchmarks, and data summary that are aligned with each other?			
Identified improvements or decisions based on the evaluation of the data?			
Additional comments: Do you, as a reviewer, have any suggestions that would make this report clearer or stronger to an external reviewer?			

RUBRIC FOR EVALUATING GENERAL EDUCATION REPORTS

Course __ANSC 270_____

Date _____

DOES THE COURSE HAVE:	YES	NO	COMMENTS / SUGGESTIONS
Appropriate and reasonable assessments for each general education outcome?	X		
A reasonable benchmark for each assessment?		X	Reviewers were concerned that the 50% benchmark on the essay question may be too low and recommended that the faculty consider raising the benchmark.
A summary of the data collected for each assessment?	X		
Assessments, benchmarks, and data summary that are aligned with each other?	X		The assessment column for SLO1 and SLO3 lists two assessments (essay question and debates). The benchmark as written seems to imply that a student must meet ONE of the two benchmarks in order to be considered as having met the benchmark. The data results lists a success rate for each of the two assessments. It would be better to remove the "(a) … or (b)…" designation in the benchmark column and rewrite as two separate benchmarks to clarify alignment.
Identified improvements or decisions based on the evaluation of the data?	X		
Additional comments: Do you, as a reviewer, have any suggestions that would make this report clearer or stronger to an external reviewer?			

RUBRIC FOR EVALUATING GENERAL EDUCATION REPORTS

Course _ASTR 201_____

Date __11/8/2019_____

DOES THE COURSE HAVE:	YES	NO	COMMENTS / SUGGESTIONS
Appropriate and reasonable assessments for each general education outcome?		X	"Subset of final exam questions" and "A set of embedded laboratory exercises" seem overly vague. It would be helpful to know how many of each are being assessed.
A reasonable benchmark for each assessment?		X	For outcome 1, it says 70% of the students get above 70% of the questions correct on the test – is this across the whole test, or the subset of the test? Also, in the data results it sounds like they're actually checking for 70% of students getting 70% or higher (benchmark sounds strictly greater than, results reported are >=). Changing "above" to "at least" would help clarify this.
A summary of the data collected for each assessment?	X		
Assessments, benchmarks, and data summary that are aligned with each other?	X		The statement describing the assessment of SLO2 sounds as if more than one lab is being assessed. However, the data results imply that only one lab was assessed. Clarity on the number of labs, and if more than one lab is involved, a description of how many labs are assessed as well as aligning the data results to the total number of labs would be helpful.
Identified improvements or decisions based on the evaluation of the data?	X		Well-reasoned decision/improvement made notes!

Additional comments: Do you, as a reviewer, have any suggestions that would make this report clearer or stronger to an external reviewer?

Five-Year Review Cycle

- The five-year review is designed to ensure that courses continue to achieve the curriculum goals of the General Education Core and the stated purpose of the category in which the course resides.

General Education Core Category	Reviewed in Spring of Years Ending in:	Next Two Revi Occur in Sprin
Biological and Physical Systems AND Mathematics	0 or 5	2020, 2025
Communications	1 or 6	2021, 2026
Fine Arts	2 or 7	2022, 2027
Humanities	3 or 8	2023, 2028
Social and Behavioral Sciences	4 or 9	2024, 2029

Recent revisions to Gen Ed Outcomes

- Gen Ed outcomes were revised in 2018.
- For some areas this resulted in having two outcomes to consider in the five-year revi
- To minimize confusion, we specified this in the reporting forms.
- We also allowed departments to choose whether they wanted to assess the old SLOs or the new SLOs for 2017-18.

Committee on Instruction Five Year Course Review
Biological and Physical Systems

Courses in Biological and Physical Systems undergo comprehensive reviews by the Faculty Senate Committee on Instruction in Spring of years ending in 0 or 5. The comprehensive review serves as justification for a course's continued inclusion in the General Education Core curriculum. A course review packet consists of (1) this completed form and (2) a copy of the most recent syllabus for this course. Once you have assembled the review packet, submit the packet to the current Chair of the Faculty Senate Committee on Instruction and to Stephanie Kolitsch (styler@utm.edu). The Faculty Senate web page lists the current committee chairs and committee memberships (see the "Faculty Senate and Committee Memberships" link). Packets are due by January 31 of the review year.

Course: _____ Date Submitted: _____

Department: _____ Contact Person: _____

The tables below list the student learning outcomes for Biological and Physical Systems. The first table lists outcomes through the 2017-18 academic year. The second table lists the outcomes effective with the 2018-19. In some cases, departments may have chosen to assess the newer outcomes in 2017-18.

For each outcome, indicate whether assessment benchmark(s) have been MET or NOT MET for each of the five previous years. If assessments for an outcome were not conducted during a particular year, indicate so by typing NA.

Outcome (through 2017-18 catalog)	Results from:			
	2014-15	2015-16	2016-17	2017-18 (if applicable)
1. Students will employ basic scientific language and processes that distinguish between scientific and non-scientific explanations.				
2. Students will conduct an experiment to test a scientific hypothesis.				
3. Students will apply theories of natural diversity, unifying principles, and repeatable patterns in nature to scientific problems or issues.				
4. Students will analyze the impact of scientific discovery on human thought and behavior.				

Outcome (beginning with 2018-19 catalog)	Results from:	
	2017-18 (if applicable)	2018-19
1. Students will demonstrate an understanding of the basic concepts in a discipline of science.		
2. Students will demonstrate any or all of the following: the application of the scientific method, laboratory techniques, and/or data analysis for reasoning and problem solving.		

Summarize any efforts to enhance student learning that have been implemented in this course during this five-year time period. Where feasible, discuss evidence of how these efforts have impacted student learning. (This narrative should not simply be cut-and-pasted from annual assessment reports. Instead, the narrative should represent the cumulative examination of the past five years of annual assessment and should reflect a broader analysis of the longitudinal results of efforts to enhance student learning in this course.)

Attach a copy of the most recent syllabus for this course. Submit the completed review packet to the Chair of the Faculty Senate Committee on Instruction and to Stephanie Kolitsch (styler@utm.edu) by January 31 of the review year.

Committee on Instruction Five Year Course Review
Fine Arts (Aesthetics)

Courses in Fine Arts (Aesthetics) undergo comprehensive reviews by the Faculty Senate Committee on Instruction in Spring of years ending in 2 or 7. The comprehensive review serves as justification for a course's continued inclusion in the General Education Core curriculum. A course review packet consists of (1) this completed form and (2) a copy of the most recent syllabus for this course. Once you have assembled the review packet, submit the packet to the current Chair of the Faculty Senate Committee on Instruction and to Stephanie Kolitsch (styler@utm.edu). The Faculty Senate web page lists the current committee chairs and committee memberships (see the "Faculty Senate and Committee Memberships" link). Packets are due by January 31 of the review year.

Course: _____ Date Submitted: _____

Department: _____ Contact Person: _____

The tables below list the student learning outcomes for Fine Arts (Aesthetics). The first table lists outcomes through the 2017-18 academic year. The second table lists the outcomes effective with the 2018-19. In some cases, departments may have chosen to assess the newer outcomes in 2017-18.

For each outcome, indicate whether assessment benchmark(s) have been MET or NOT MET for each of the five previous years. If assessments for an outcome were not conducted during a particular year, indicate so by typing NA.

Outcome (through 2017-18 catalog)	Results from:	
	2016-17	2017-18 (if applicable)
1. Students will practice the critical and analytical methodologies of the fine arts.		
2. Students will analyze significant works of cultural and creative expression.		
3. Students will explain the ways in which creative processes and expression throughout the ages convey the culture and values of a time and place.		
4. Students will develop a personal aesthetic perspective.		

Outcome (beginning with 2018-19 catalog)	Results from:			
	2017-18 (if applicable)	2018-19	2019-20	2020-21
1. Students will interpret the meaning of art within its context.				
2. Students will develop a personal aesthetic response.				
3. Students will analyze the relevance of art in a global society.				

Summarize any efforts to enhance student learning that have been implemented in this course during this five-year time period. Where feasible, discuss evidence of how these efforts have impacted student learning. (This narrative should not simply be cut-and-pasted from annual assessment reports. Instead, the narrative should represent the cumulative examination of the past five years of annual assessment and should reflect a broader analysis of the longitudinal results of efforts to enhance student learning in this course.)

Attach a copy of the most recent syllabus for this course. Submit the completed review packet to the Chair of the Faculty Senate Committee on Instruction and to Stephanie Kolitsch (styler@utm.edu) by January 31 of the review year.

Five-Year Review Templates

- Biological and Physical Systems
- Mathematics
- Communications
- Fine Arts
- Humanities
- Social and Behavioral Sciences
- **https://www.utm.edu/assessment/forms.php**

The Five-Year Review Packet

- The Five-Year Review Packet consists of the completed Five-Year Review Form AND the most recent syllabus for the course under review.

Five-Year Review

- Courses submit Five-Year Review Pac
- The Faculty Senate Committee on Instruction reviews the Five-Year Review Packets and corresponding syllabi to make recommendations concerning continued inclusion of the course in the Gen Ed core curriculum.

Committee on Instruction Five Year Course Review
Biological and Physical Systems

Course: BIOL 130 – Foundations of Biology I: Ecology, Evolution, and Diversity

Date Submitted:

Department: Biological Sciences

Contact Person: Ali Sabahi

For each outcome, indicate whether assessment benchmark(s) have been MET or NOT MET for each of the five previous years. If assessments for an outcome were not conducted during a particular year, indicate so by typing NA.

Outcomes (through 2017-18 catalog)	Results from:			
	2014-15	2015-16	2016-17	2017-18
1. Students will employ basic scientific language and processes that distinguish between scientific and non-scientific explanations.	Not Met	Not Met	Not Met	Met
2. Students will conduct an experiment to test a scientific hypothesis.	Not Met	Met	Not Met	Not Met
3. Students will apply theories of natural diversity, unifying principles, and repeatable patterns in nature to scientific problems or issues.	Not Met	Not Met	Not Met	Met
4. Students will analyze the impact of scientific discovery on human thought and behavior.	Not Met	Not Met	Not Met	Not Met

Outcomes (2018-19)	2018-19
1. Students will demonstrate an understanding of the basic concepts in a discipline of science.	Met
2. Students will demonstrate any or all of the following: the application of the scientific method, laboratory techniques, and/or data analysis for reasoning and problem solving.	Met

Summarize any efforts to enhance student learning that have been implemented in this course during this five-year time period. Where feasible, discuss evidence of how these efforts have impacted student learning. (This narrative should not simply be cut-and-pasted from annual assessment reports. Instead, the narrative should represent the cumulative examination of the past five years of annual assessment and should reflect a broader analysis of the longitudinal results of efforts to enhance student learning in this course.)

With respect to the SLOs addressing the scientific method and hypothesis testing (SLO #2 during both 2014-18 and 2018-19), the BIOL 130 instructors standardized the way we teach the scientific method. Exercises in the lab manual that addressed the scientific method were rewritten to fit the common format. We have also increased the amount of lecture and lab content that addresses the scientific method and hypothesis testing.

We focus on the topic of evolution as a focus theory of a unifying principle (SLO #3 in 2014-18) and as a basic concept in the biology discipline (SLO #2 in 2018-19). BIOL 130 instructors have altered lecture material to put a greater emphasis on certain aspects of evolution; specifically, the topic of convergent evolution and the causative agents of evolution. One multiple-choice question that we use for assessment (see question #1 in the 2018-19 assessment report) speaks directly to a misconception held by the population in general and evolutionary mechanism, and as such we hypothesize that it is especially difficult for students to alter this preconceived notion. The BIOL 130 instructors are dedicating more lecture time to explain this concept, and while we plan to continue using this question, we are interesting in testing the effect of changing the answer order in future assessments, i.e. presenting the correct answer before the most-commonly selected incorrect answer.

Committee on Instruction Five Year Course Review
Biological and Physical Systems

Courses in Biological and Physical Systems undergo comprehensive reviews by the Faculty Senate Committee on Instruction in Spring of years ending in 0 or 5. The comprehensive review serves as justification for a course's continued inclusion in the General Education Core curriculum. A course review packet consists of (1) this completed form and (2) a copy of the most recent syllabus for this course. Once you have assembled the review packet, submit the packet to the current Chair of the Faculty Senate Committee on Instruction and to Stephanie Kolitsch (styler@utm.edu). The Faculty Senate web page lists the current committee chairs and committee memberships (see the "Faculty Senate and Committee Memberships" link). Packets are due by January 31 of the review year.

Course: Chem 121 Date Submitted: 01/31/2020

Department: Chemistry and Physics Contact Person: Verna B. Baron

The tables below list the student learning outcomes for Biological and Physical Systems. The first table lists outcomes through the 2017-18 academic year. The second table lists the outcomes effective with the 2018-19 academic year. In some cases, departments may have chosen to assess the newer outcomes in 2017-18.

For each outcome, indicate whether assessment benchmark(s) have been MET or NOT MET for each of the five previous years. If assessments for an outcome were not conducted during a particular year, indicate so by typing NA.

Outcome (through 2017-18 catalog)	Results from:			
	2014-15	2015-16	2016-17	2017-18 (if applicable)
1. Students will employ basic scientific language and processes that distinguish between scientific and non-scientific explanations.	NA	Met	Met	
2. Students will conduct an experiment to test a scientific hypothesis.	met	NA	Met	
3. Students will apply theories of natural diversity, unifying principles, and repeatable patterns in nature to scientific problems or issues.	Not Met	NA	Not Met	
4. Students will analyze the impact of scientific discovery on human thought and behavior.	NA	NA	Met	

Outcome (beginning with 2018-19 catalog)	Results from:	
	2017-18 (if applicable)	2018-19
1. Students will demonstrate an understanding of the basic concepts in a discipline of science.	Met	Met
2. Students will demonstrate any or all of the following: the application of the scientific method, laboratory techniques, and/or data analysis for reasoning and problem solving.	Not Met	Met

Summarize any efforts to enhance student learning that have been implemented in this course during this five-year time period. Where feasible, discuss evidence of how these efforts have impacted student learning. (This narrative should not simply be cut-and-pasted from annual assessment reports. Instead, the narrative should represent the cumulative examination of the past five years of annual assessment and should reflect a broader analysis of the longitudinal results of efforts to enhance student learning in this course.)

Over the 5 year period of interest, the assessments consisted of selected subset questions from the course's final exam, as well as laboratory experiments. The assessments have not been consistent over this 5 year period, with several changes made in an attempt to develop suitable assessments. While in most cases of the SLO's benchmark was met, there is always room for improvement. In the case of SLO #1 for example, it is seen that the mean score for the subset of question, as well as the exam mean, has steadily increase over the last 3 years. This is due to efforts made the faculty adjust their lecture coverage to target the question content which student typically perform poorly on the final. The implementation Supplemental Instruction, by several faculty members, has also assisted enhancing student learning.

Attach a copy of the most recent syllabus for this course. Submit the completed review packet to the Chair of the Faculty Senate Committee on Instruction and to Stephanie Kolitsch (styler@utm.edu) by January 31 of the review year.

Website

- All forms, instructions, and other information are housed and freely available on our website:
- https://www.utm.edu/assessment/forms.php

Questions?

- Contact Information:

- Patty Flowers
  pflowers@utm.edu

  Assessment Coordinator

- Stephanie Kolitsch
  skolitsc@utm.edu

  Director of Accreditation, SACSCOC Liaison, and Interim Director of IR

Tuning in to a Clearer Vision of General Education

Presented at IUPUI Virtual Assessment Conference

October 25-28, 2020

Patty Flowers, Assessment Coordinator

pflowers@utm.edu

Stephanie Kolitsch, Director of Accreditation, SACSCOC Liaison, and Interim Director of Institutional Research

skolitsc@utm.edu

All forms, instructions, and other information are housed and freely available on our website: https://www.utm.edu/assessment/forms.php