THE MASTER'S UNIVERSITY

AEFIS Direct Assessment Summary Report

For the **BS in Biological & Physical Sciences** Program

for the Fall 2017 – Spring 2019 Terms

Including Program-level Learning Outcome Data for:

- BS in Biological & Physical Sciences – Core
- BS in Biological & Physical Sciences – Animal Science / Pre-Veterinary Medicine
- BS in Biological & Physical Sciences – Cellular & Molecular Biology
- BS in Biological & Physical Sciences – General
- BS in Biological & Physical Sciences – Natural History / Environmental Science
- BS in Biological & Physical Sciences – Paleontology
- BS in Biological & Physical Sciences – Pre-Medical & Pre-Dental

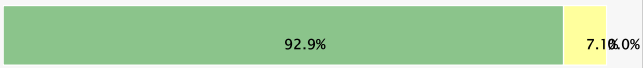
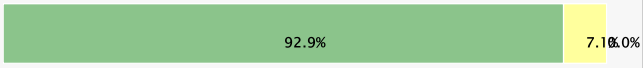
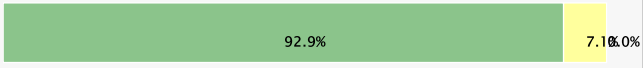
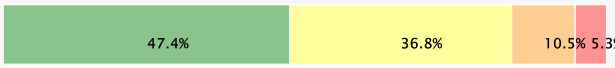
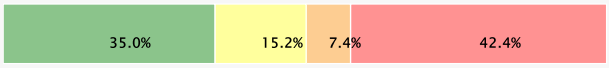
Report Parameters

Program: TMU BS in Biological Sciences - Core
Term: 2019 Spring TMU Trad, 2018 Summer TMU Trad and 3 more...
Detail Level: Learning Indicator
Athletic Status: No records found!
Edit Report Parameters

Direct Assessment Summary Report

Export

PLO & PI Id	Program Level Learning Outcome	Total Obs.	Cumulative Percent Distribution of Student Performance Levels	% at Mastery
U.BS.BIO.01	Employ the methods of science to solve research questions.			
U.BS.BIO.1.PI4	Correctly measures and records the physical properties of the unknown.	23	0.0% 100.0%	0 %
U.BS.BIO.1.PI5	Selects and performs appropriate chemical tests to identify the functional group of the compound.	23	0.0% 100.0%	0 %
U.BS.BIO.1.PI6	Select and successfully prepare the most useful derivative of the unknown.	23	0.0% 100.0%	0 %
Average Student Performance Level across all PIs for this PLO.		69	0.0% 100.0%	0 %
U.BS.BIO.02	Employ a knowledge of cell structure and function to analyze and interpret scientific data.			
U.BS.BIO.2.PI1	Student Percentile Score on the ETS MFT– Cell Biology Sub-score.	18	11.1% 16.7% 38.9% 33.3%	28 %
Average Student Performance Level across all PIs for this PLO.		18	11.1% 16.7% 38.9% 33.3%	28 %
U.BS.BIO.03	Apply taxonomy, phylogeny, and diversification of living organisms to analyze and interpret scientific data.			
U.BS.BIO.3.PI1	Student Percentile Score on the ETS MFT– Organismal Biology Sub-score.	18	5.6% 38.9% 5.6% 50.0%	44 %
U.BS.BIO.3.PI2	Correctly interprets the data in the context of phylogenetics.	14	92.9% 7.1%	100 %
U.BS.BIO.3.PI3	Correctly interpret the data in the context of speciation.	14	92.9% 7.1%	100 %

Average Student Performance Level across all PIs for this PLO.		46		78 %
U.BS.BIO.04	Apply the principles of inheritance, and use genomes to compare organisms and diagnose disease.			
U.BS.BIO.4.PI1	Student Percentile Score on the ETS MFT– Molecular Biology & Genetics Sub-score..	18		44 %
Average Student Performance Level across all PIs for this PLO.		18		44 %
U.BS.BIO.05	Integrate Scripture and science to explain God's revealed Truth.			
U.BS.BIO.5.PI1	Correctly explains varying strategies to explain conflict between Scripture and the current scientific paradigm.	14		100 %
U.BS.BIO.5.PI2	Provides a rational alternative explanation using Scripture as scientific fact.	14		100 %
Average Student Performance Level across all PIs for this PLO.		28		100 %
U.BS.BIO.06	Employ mathematical tools to analyze data and solve research questions. (BS Core only.)			
U.BS.BIO.6.PI3	Chooses appropriate mathematical approach to solve the problem presented.	19		84 %
U.BS.BIO.6.PI4	Accurately completes necessary mathematical calculations to obtain a solution.	19		84 %
Average Student Performance Level across all PIs for this PLO.		38		84 %
Average Student Performance Level across all PLOs in this Program.		217		50 %

Report Parameters

Program: TMU BS in Biological & Physical Sciences - Animal Sciences/Pre-Veterinary Medicine
Term: 2019 Spring TMU Trad, 2018 Summer TMU Trad and 3 more...
Detail Level: Learning Indicator
Athletic Status: No records found!
Edit Report Parameters

Direct Assessment Summary Report

Export

PLO & PI Id	Program Level Learning Outcome	Total Obs.	Cumulative Percent Distribution of Student Performance Levels	% at Mastery
U.BS.BIO.ASVM.01	Analyze an ecosystem to identify relationships among organisms and that environment.			
U.BS.BIO.ASVM.1.PI1	Correctly describes the relationship between the ecosystem and humans. (Same as U.BS.BIO.ENVR.1.PI1)	10	90.0% 10.0% 0.0%	100 %
U.BS.BIO.ASVM.1.PI2	Explains strategies that maximize the potential that the ecosystem service will be sustainable. (Same as U.BS.BIO.ENVR.1.PI2)	10	90.0% 10.0% 0.0%	100 %
U.BS.BIO.ASVM.1.PI3	The project integrates a biblical stewardship perspective into the approach to sustainable ecosystem services. (Same as U.BS.BIO.ENVR.1.PI3)	10	100.0% 0.0%	100 %
Average Student Performance Level across all PIs for this PLO.		30	93.3% 6.7% 0.0%	100 %
Average Student Performance Level across all PLOs in this Program.		30	93.3% 6.7% 0.0%	100 %

Report Parameters

Program: TMU BS in Biological & Physical Sciences - Cellular & Molecular Biology
Term: 2019 Spring TMU Trad, 2018 Summer TMU Trad and 3 more...
Detail Level: Learning Indicator
Athletic Status: No records found!
Edit Report Parameters

Direct Assessment Summary Report

Export

PLO & PI Id	Program Level Learning Outcome	Total Obs.	Cumulative Percent Distribution of Student Performance Levels	% at Mastery
U.BS.BIO.CELL.02	Integrate thermodynamics and biochemical pathways to describe metabolism.			
U.BS.BIO.CELL.2.PI1	Individual student percent scores from the final course exam.	8	0.0% 87.5% 0.0% 12.5%	88 %
U.BS.BIO.CELL.2.PI2	Individual percentile scores on the ETS MFT Biology - Biochemistry & Cell Energetics Assessment Indicator.	18	0.0% 100.0%	0 %
Average Student Performance Level across all PIs for this PLO.		26	0.0% 26.9% 0.0% 73.1%	27 %
Average Student Performance Level across all PLOs in this Program.		26	0.0% 26.9% 0.0% 73.1%	27 %

Report Parameters

Program: TMU BS in Biological & Physical Sciences - General
Term: 2019 Spring TMU Trad, 2018 Summer TMU Trad and 3 more...
Detail Level: Learning Indicator
Athletic Status: No records found!
Edit Report Parameters

Direct Assessment Summary Report

Export

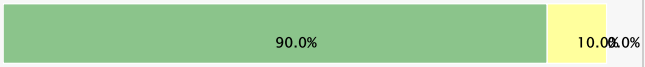
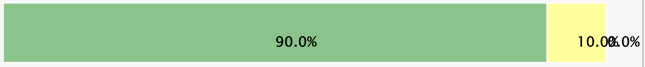
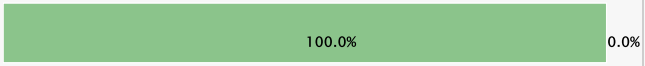
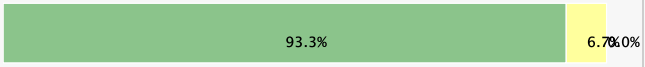
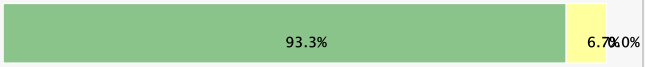
PLO & PI Id	Program Level Learning Outcome	Total Obs.	Cumulative Percent Distribution of Student Performance Levels	% at Mastery
U.BS.BIO.GNL.01	Analyze an ecosystem to identify relationships among organisms and that environment.			
U.BS.BIO.GNL.1.PI1	Correctly describes the relationship between the ecosystem and humans. (Same as U.BS.BIO.ENVR.1.PI1)	10	90.0% 10.0% 0.0%	100 %
U.BS.BIO.GNL.1.PI2	Explains strategies that maximize the potential that the ecosystem service will be sustainable. (Same as U.BS.BIO.ENVR.1.PI2)	10	90.0% 10.0% 0.0%	100 %
U.BS.BIO.GNL.1.PI3	The project integrates a biblical stewardship perspective into the approach to sustainable ecosystem services. (Same as U.BS.BIO.ENVR.1.PI3)	10	100.0% 0.0%	100 %
Average Student Performance Level across all PIs for this PLO.		30	93.3% 6.7% 0.0%	100 %
Average Student Performance Level across all PLOs in this Program.		30	93.3% 6.7% 0.0%	100 %

Report Parameters

Program: TMU BS in Biological & Physical Sciences - Natural History/Environmental Biology
Term: 2019 Spring TMU Trad, 2018 Summer TMU Trad and 3 more...
Detail Level: Learning Indicator
Athletic Status: No records found!
Edit Report Parameters

Direct Assessment Summary Report

Export

PLO & PI Id	Program Level Learning Outcome	Total Obs.	Cumulative Percent Distribution of Student Performance Levels	% at Mastery
U.BS.BIO.ENVR.01	Analyze an ecosystem to identify relationships among organisms and that environment.			
U.BS.BIO.ENVR.1.PI1	Correctly describes the relationship between the ecosystem and humans.	10		100 %
U.BS.BIO.ENVR.1.PI2	Explains strategies that maximize the potential that the ecosystem service will be sustainable.	10		100 %
U.BS.BIO.ENVR.1.PI3	The project integrates a biblical stewardship perspective into the approach to sustainable ecosystem services.	10		100 %
Average Student Performance Level across all PIs for this PLO.		30		100 %
Average Student Performance Level across all PLOs in this Program.		30		100 %

Report Parameters

Program: TMU BS in Biological & Physical Sciences - Paleontology
Term: 2019 Spring TMU Trad, 2018 Summer TMU Trad and 3 more...
Detail Level: Learning Indicator
Athletic Status: No records found!
Edit Report Parameters

Direct Assessment Summary Report

Export

PLO & PI Id	Program Level Learning Outcome	Total Obs.	Cumulative Percent Distribution of Student Performance Levels	% at Mastery
U.BS.BIO.PAL.01	Analyze an ecosystem to identify relationships among organisms and that environment.			
U.BS.BIO.PAL.1.PI1	Correctly describes the relationship between the ecosystem and humans. (Same as U.BS.BIO.ENVR.1.PI1)	10	100.0% 0.0%	100 %
U.BS.BIO.PAL.1.PI2	Explains strategies that maximize the potential that the ecosystem service will be sustainable. (Same as U.BS.BIO.ENVR.1.PI2)	10	90.0% 10.0% 0.0%	100 %
U.BS.BIO.PAL.1.PI3	The project integrates a biblical stewardship perspective into the approach to sustainable ecosystem services. (Same as U.BS.BIO.ENVR.1.PI3)	10	90.0% 10.0% 0.0%	100 %
Average Student Performance Level across all PIs for this PLO.		30	93.3% 6.7% 0.0%	100 %
U.BS.BIO.PAL.02	Interpret earth history using the fossil record.			
U.BS.BIO.PAL.2.PI1	Correctly describes the stratigraphic range of the fossil taxon.	7	100.0% 0.0%	100 %
U.BS.BIO.PAL.2.PI2	Accurately explains the taxonomic and phylogenetic relationships within and outside of the taxon.	7	100.0% 0.0%	100 %
U.BS.BIO.PAL.2.PI3	Effectively compares and contrasts a conventional and theocentric perspective on the fossil record of the taxon in question.	7	100.0% 0.0%	100 %
U.BS.BIO.PAL.2.PI4	Student percent score on final exam in LS375.	7	85.7% 14.3% 0.0%	100 %
Average Student Performance Level across all PIs for this PLO.		28	96.4% 3.6% 0.0%	100 %
Average Student Performance Level across all PLOs in this Program.		58	94.8% 5.2% 0.0%	100 %

Report Parameters

Program: TMU BS in Biological & Physical Sciences - Pre-Medical/Pre-Dentistry/Pre-Allied Health
Term: 2019 Spring TMU Trad, 2018 Summer TMU Trad and 3 more...
Detail Level: Learning Indicator
Athletic Status: No records found!
Edit Report Parameters

Direct Assessment Summary Report

Export

PLO & PI Id	Program Level Learning Outcome	Total Obs.	Cumulative Percent Distribution of Student Performance Levels	% at Mastery
U.BS.BIO.PMD.01	Analyze an ecosystem to identify relationships among organisms and that environment.			
U.BS.BIO.PMD.1.PI1	Correctly describes the relationship between the ecosystem and humans. (Same as U.BS.BIO.ENVR.1.PI1)	10	90.0% 10.0% 0.0%	100 %
U.BS.BIO.PMD.1.PI2	Explains strategies that maximize the potential that the ecosystem service will be sustainable. (Same as U.BS.BIO.ENVR.1.PI2)	10	90.0% 10.0% 0.0%	100 %
U.BS.BIO.PMD.1.PI3	The project integrates a biblical stewardship perspective into the approach to sustainable ecosystem services. (Same as U.BS.BIO.ENVR.1.PI3)	10	100.0% 0.0%	100 %
Average Student Performance Level across all PIs for this PLO.		30	93.3% 6.7% 0.0%	100 %
U.BS.BIO.PMD.02	Integrate thermodynamics and biochemical pathways to describe metabolism.			
U.BS.BIO.PMD.2.PI1	Individual student percent scores from the final course exam.	8	0.0% 87.5% 0.0% 12.5%	88 %
U.BS.BIO.PMD.2.PI2	Student Percentile Score on the ETS MFT– Biochemistry & Cell Energetics Assessment Indicator	18	0.0% 100.0%	0 %
Average Student Performance Level across all PIs for this PLO.		26	0.0% 26.9% 0.0% 73.1%	27 %
Average Student Performance Level across all PLOs in this Program.		56	50.0% 16.1% 0.0% 33.9%	66 %