Program-Level Assessment Plan

Program: Biomedical Engineering	Degree Level (e.g., UG or GR certificate, UG major, master's program, doctoral program): B.S.
Department: Biomedical Engineering	College/School: School of Science and Engineering
Date (Month/Year): October 2023	Primary Assessment Contact: Marta Cooperstein

Note: Each cell in the table below will expand as needed to accommodate your responses.

#	Student Learning Outcomes	Curriculum Mapping	Assessment Methods
	What do the program faculty expect all students to know or be able to do as a result of completing this program? Note: These should be measurable and manageable in number (typically 4-6 are sufficient).	In which courses will faculty intentionally work to foster some level of student development toward achievement of the outcome? Please clarify the level at which student development is expected in each course (e.g., introduced, developed, reinforced, achieved, etc.). I – INTRODUCED R – REINFORCED E – EMPHASIZED	**Artifacts of Student Learning (What)** 1. What artifacts of student learning will be used to determine if students have achieved this outcome? 2. In which courses will these artifacts

	ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives. **(ABET 5)**	BME 2200 (I) BME 3840 (R) BME 4600 (E) BME 4960 (E) BME 5965 (E)	BME 2200: Group oral presentation BME 3840: Pre-lab and post-lab exercises, reports, in-lab performance BME 4600: Problem sets, projects BME 4960: Peer assessment, reports	will provide an initial analysis, and the faculty within the program will review the instructor analysis at the annual assessment meeting, held at the conclusion of the academic year. 2. While faculty are responsible for assessing each artifact individually, outcomes are assessed via Form 3.5 and Student Learning Outcomes rubrics each year
3	Graduates will demonstrate an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, 6 res			

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Outcome #2: An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

	Unsatisfactory			

Outcome #3: An ability to communicate effectively with a range of audienc

	Unsatisfactory	Developing	Satisfactory	Exemplary
Organize the material to be communicated, with any accompanying slides designed to look both professional and graphically appealing.	- Little organization - Missing problem statement - Mission conclusion/summary - Missing other major sections - Missing references - Too much or small font text - Missing /Low-quality graphics - Slides do not support speaker	- Confusing organization - Weak problem statement - Weak conclusion or summary - Other sections are weak - Weak list of references - Slides not graphically appealing (e.g. white space) - Verbiage not clear and concise	- Mostly logical and complete organization - Adequate problem statement - Adequate conclusion/summary - Adequate list of references - Slide content is clear - Images are relevant	- Excellent organization - Well-stated problem statement or purpose - Strong conclusion or summary - Thorough list of references - Images enhance the message - Text clear and concise - Very graphically appealing
Presents content in own words, demonstrating comprehension of material				

Outcome #4: An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

	Unsatisfactory	Developing	Satisfactory	

Outcome #5: An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives

	Unsatisfactory	Developing	Satisfactory	Exemplary
Establish a collaborative and inclusive team environment	- Does not provide			

Outcome #6: An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

Outcome #7: An ability to acquire and apply new knowledge as needed, using appropriate learning strategies

	Unsatisfactory	Developing	Satisfactory	Exemplary
Identify necessary techniques, skills, and tools / resources for advancing research or technology	- Identifies a small subset of necessary techniques, skills, and tools / resources - Identifies unrelated techniques, skills, and tools / resources	- Identifies some techniques, skills, and tools / resources, but missing some important items - Includes some unrelated techniques, skills, and tools / resources	- Identifies almost all of the relevant techniques, skills, and tools / resources - Missing some minor techniques, skills, and tools / resources	- Identifies all relevant techniques, skills, and tools / resources
Explain the use of the new techniques, skills, and tools / resources	- Provides little explanation of how the techniques, skills, and tools / resources should be used - Provides incorrect explanation of how to use the techniques, skills, and tools / resources			

Phase-2 (Indirect) Faculty Assessment: Discuss the basis for the indirect faculty assessment here. Please also provide your overall class assessment and, if necessary, an action plan to address concerns.

Outcome	Unsatisfactory	Developing	Satisfactory	Exemplary	Overall Level
1					
2					
3					

Outcome	Unsatisfactory	Developing	Satisfactory	Exemplary	Overall Level
A					
B					
C					
D					

Table F3.5-2: Summary of Phase

Appendix

Phase-1 (Direct) Assessment Metho1 (de)4 (c)-5 (om5285.. A)1 (d1Tw 3.4 Td(T)1)Tj33 0.5MCID 2 B0(s
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