August 1st, 2023

**Senior Design Sponsors Evaluation\_Proposed Revision**

1. **Problem Solving**

Demonstrated ability to identify, formulate, and solve complex engineering problems (including those associated with the interaction between living and nonliving systems) by applying principles of engineering, physical (calculus based physics, chemistry) and life sciences (biology, human physiology), and mathematics (through differential equations and statistics). **(1-10)**

1. **Engineering Design**

Demonstrated ability to apply engineering design to realize/produce solutions that meet specified biomedical engineering problems and needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors. **(1-10)**

1. **Communication**

An ability to communicate effectively with a range of audiences. **(1-10)**

1. **Ethics and Professional Responsibilities**

An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, health, safety, and societal contexts. **(1-10)**

1. **Teamwork**

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. **(1-10)**

1. **Engineering Analysis**

An ability to develop and conduct appropriate experimentation to measure, analyze and interpret data from living and non-living systems, and use engineering judgment to draw conclusions. **(1-10)**

1. **Lifelong Learning**

An ability to acquire new knowledge as needed, using appropriate learning strategies in acquiring techniques and skills necessary for biomedical engineering practice; including the ability to model and perform engineering analyses of biomedical devices, systems, components, and processes. **(1-10)**

1. **Professional & Technical Engagement**

Demonstrated ability to effectively engage multiple constituencies including patients, sponsors, suppliers, fabricators, technical support entities, and identify and leverage resources locally, nationally, and internationally as needed. **(1-10)**

1. **Project Management**

Demonstrated effective project planning, management and execution and the ability to predict and navigate challenges and obstacles to the project, and the ability to formulate and implement effective and appropriate contingencies. **(1-10)**

1. **Project Learning Outcomes**

Demonstrated understanding and implementation of current medical device product/process development process, including clear identification of clinical needs, corresponding market requirements, design inputs, design thinking and design progression, including development of design concepts, computer modeling and simulations for performance prediction, manufacturing, verification, and documentation procedures. **(1-10)**

***The following question does not count toward the evaluation of the students, but is intended to gauge customer satisfaction.***

How likely are you to sponsor or recommend sponsorship of FIU Senior Design Projects in the future?

* Highly unlikely
* Somewhat likely
* Likely
* More than likely
* Definitely