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| **EPICS Senior Design Outcomes Matrix** | | |  |
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| **Student's Name:** | |  |
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| **Team:** | | **Project:** |  |
| **Instructions:**  Each senior design student is required to complete this outcome matrix at midterm and end of each semester. The student should provide as much detail as possible on their completed work toward each outcome, as well as their planned approach to demonstrating each outcome through their senior design coursework. Students should indicate where the best examples of documentation that demonstrate the outcome would be found. This matrix will be submitted to the instructor to assist them in evaluating the student using the Senior Design Individual Evaluation Rubric. | | |  |
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| **Outcomes:** | | **Describe your approach to achieving each outcome and where evidence will be documented:** | **Student Initials & Date:** |
| i. An ability to apply engineering design to create a product (any device, system, process, software, etc. resulting from this design experience) that meets the specified needs of this engineering design experience with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors. | |  |  |
| ii. An ability to develop and conduct experimentation, analyze and interpret data, and use engineering judgment to draw conclusions related to the development of the product of this engineering design experience. | |  |  |
| iii. An ability to identify, formulate, and solve complex engineering problems arising from this engineering design experience by applying principles of engineering, science, and mathematics. | |  |  |
| iv. 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 associated with this design experience. | |  |  |
| v. An ability to communicate effectively with a range of audiences appropriate to this design experience in both a written report and oral presentation. | |  |  |
| vi. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies to complete the engineering design experience associated with this course. | |  |  |
| vii. An ability to recognize ethical and professional responsibilities associated with this engineering design experience and make informed judgments which must consider the impact of the product of this engineering design experience, in global, economic, environmental, and societal contexts. | |  |  |
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