

**Intermountain SeaPerch Challenge - Scoring Rubric**

*2021 SeaPerch Season*

**TOTAL SCORE: \_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |
| --- | --- | --- | --- |
| **TEAM INFORMATION** | | | |
| **TEAM NUMBER** |  | | |
| **TEAM NAME** |  | | |
| **SCHOOL** |  | | |
| **GRADE** | ELEMENTARY (K-5) | MIDDLE SCHOOL (6-8) | HIGH SCHOOL (9-12) |

|  |
| --- |
| **SCORING GUIDELINES** |
| **Poor** (0 Points)  *Requirements missing* |
| **Fair** (1 points)  *Minimally meets requirements. Below Average.* |
| **Good** (2 points)  *Meets basic requirements. Average.* |
| **Excellent** (3 points)  *Meets all requirements. Above Average.* |
| **Exceptional** (4 points)  *Meets and exceeds requirements. Superior.* |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **1.ABSTRACT** | **0** | **1** | **2** | **3** | **4** | **Points** |
| **Limited to ½ page** | Exceeds page limit |  | Within page limit |  | |  |
| **Report Summarization** | Does not summarize main points of the report |  | | | Includes a clear overview of the report. |  |
| **Unique ROV design and/or processes** | No discussion of ROV design or process. | Limited discussion of design and/or process | Basic overview of design and/or process with minimal focus on unique traits | Good overview of design and/or process with focus on unique traits. | Robust discussion of unique design and/or process. |  |
| **TOTAL ABSTRACT SCORE (10 POINTS MAX)** | | | | | |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **2.TASK OVERVIEW** | **0** | **1** | **2** | **3** | **4** | **Points** |
| **Limited to ½ page** | Exceeds page limit |  | Within page limit |  | |  |
| **Overview of intended tasks** | No overview of intended task(s). | Limited overview of intended task(s). | Basic overview of intended task(s). | Good overview of intended task(s); may lack task detail. | Robust, detailed discussion of intended task(s). |  |
| **Design approach justification** | No discussion of task influence on design. | Limited overview of how tasks impacted design. | Basic discussion of how tasks impacted design. | Good discussion of how tasks impacted design. | Robust, detailed discussion of design justification. |  |
| **TOTAL TASK OVERVIEW SCORE (10 POINTS MAX)** | | | | | |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **3.DESIGN APPROACH** | **0** | **1** | **2** | **3** | **4** | **Points** |
| **Limited to 2 pages** | Exceeds page limit |  | | | Within page limit |  |
| **Approach to the Engineering Design Process (EDP)** | No overview of team approach to EDP. | Discussion focuses on reiterating published information. | Basic discussion of team’s incorporation of EDP. | Good discussion of team’s approach to EDP. | Robust discussion of team’s strategy to EDP. |  |
| **Design iterations** | No discussion of design iterations. | Limited discussion of design iterations. | Basic discussion of design iterations. | Good discussion and analysis of design iterations. | Robust discussion and analysis of design iterations. |  |
| **Conceptual drawings and/or graphics** | No drawings or graphics. | Limited graphics that lack context within report. | Includes graphic(s) with basic context within report. | Good graphic(s) with context within report. | High-quality graphics with labels that enhance text. |  |
| **Novelty of ROV design or approach** | No discussion of design or approach novelty. | Limited discussion of what makes the ROV design or approach unique. | Basic discussion of design or approach novelty. | Good discussion of design or approach novelty. | Robust discussion and analysis of novelty of ROV design and/or approach. |  |
| **TOTAL DESIGN APPROACH SCORE (20 POINTS MAX)** | | | | | |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **4.RESULTS** | **0** | **1** | **2** | **3** | **4** | **Points** |
| **Limited to 1 page** | Exceeds page limit |  | Within page limit |  | |  |
| **In-water and/or simulated testing overview** | No discussion of testing. | Limited overview of testing. | Basic overview and discussion of testing. | Good discussion and analysis of testing. | Exceptional discussion and analysis of testing models. |  |
| **Test results** | No test results included. | Limited test results with no graphs or charts. | Basic discussion of results with graphs and/or charts. | Good analysis of results with graphs and/or charts. | Robust analysis of test results with graphs and/or charts. |  |
| **TOTAL TASK OVERVIEW SCORE (10 POINTS MAX)** | | | | | |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **5.Reflection & Next Steps** | **0** | **1** | **2** | **3** | **4** | **Points** |
| **Limited to 1 page** | Exceeds page limit |  | Within page limit |  | |  |
| **Reflection on the design process** | No reflection on the design process. | Limited reflection on the design process. | Basic reflection on the design process. | Good reflection and basic analysis of the design process. | Thoughtful reflection and analysis of the design process. |  |
| **Next Steps** | No discussion of next steps. | Limited discussion of next steps. | Basic discussion of next steps. | Good overview of future plans for ROV or team. | Robust overview of future plans for ROV and team. |  |
| **TOTAL TASK OVERVIEW SCORE (10 POINTS MAX)** | | | | | |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **6.Writing Skills** | **0** | **1** | **2** | **3** | **4** | **Points** |
| **Limited to 5 pages** | Exceeds page limit |  | Within page limit |  | |  |
| **Organization** | Organization severely impacts ability to follow the report. | Minimal organization with section headers. | Good organization within each section |  | |  |
| **Readability** | Report is inconsistent and difficult to follow. | Report is somewhat inconsistent and difficult to follow. | Report is mostly consistent but lacks some clarity, focus, and/or cohesion. | Report is well written and easy to follow. | Concise and cohesive report. Easy to understand. Supported by text/graphics |  |
| **Spelling and Grammar** | Significant spelling or grammatical errors (5+). | Minimal spelling or grammatical errors (1-4). | No spelling or grammatical errors. |  | |  |
| **TOTAL TASK OVERVIEW SCORE (10 POINTS MAX)** | | | | | |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **7.TEAM PRESENTATION** | **0** | **1** | **2** | **3** | **4** | **Points** |
| **Preparation** | No preparation | Lack of adequate preparation. | Adequate preparation. Provide some details about ROV design and methods. | Good preparation. Provide details about design and methods. | Extensive preparation. Provide complete, detailed and descriptive details about ROV design and methods. |  |
| **Subject Knowledge** | No Subject Knowledge | Provides underdeveloped answers, demonstrating limited understanding. | Demonstrates an adequate or basic understanding of the subject matter. | Demonstrates a good understanding of the subject matter. | Provides authoritative answers, demonstrating a thorough understanding of the subject matter. |  |
| **Required Questions** | Not able to answer any questions. | Required questions are not answered. | Required questions are somewhat answered. | All required questions are answered. | All required questions are answered in detail and are clearly communicated. |  |
| **Enthusiasm** | No enthusiasm. | Great trouble recovering from mistakes. Shows nervousness, displays a complete lack confidence, and uses oral fillers throughout. | Trouble recovering from mistakes, displays mild tension, shows a lack confidence some of the time, and uses oral fillers. | Quickly recovers from mistakes, displays little tension. and is confident most of the time with only minimal use of oral fillers. | Relaxed, self-confident nature with no mistakes or oral fillers and shows good enthusiasm. |  |
| **Elocution** | No elocution. | Mumbling, mispronounces many terms, and speaks too quietly to be heard. | Use of a low voice, mispronounces some terms, or difficult to hear at times. | Use of a clear voice and good pronunciation/ projection the majority of the time. | Use of a clear voice and appropriately modifies projection, pronunciation, volume or tone to enhance answers. |  |
| **TOTAL TEAM PRESENTATION SCORE (20 POINTS MAX)** | | | | | |  |