

Alaska Region NOSB - Tsunami Bowl – Rules Regarding the Research Project & Quiz Bowl

Eligibility Rules

1. Each competing team consists of at least four but no more than five student members, and a coach. The students that work on the research paper should be the same students that attend the Tsunami Bowl, give the oral presentation and compete in the quiz bowl. The students that compete in the quiz bowl should be the same students that worked on the research project.
2. All other eligibility rules for participants of the research project are the same as those posted on the NOSB web site for participants in the National Ocean Sciences Bowl.

Tsunami Bowl Scoring

3. The research project and the round robin quiz matches will be used to seed the final elimination brackets.
4. Within the research project, scores will be assigned to each paper and oral presentation by a panel of judges, with a maximum of 100 points possible for each. The number of points awarded to each paper and oral presentation will be the average of the judges' scores. The total score for a team's research project will be the sum of the average points awarded for each team's paper and oral presentation.
5. If there are any ties in the total project scores when the teams' points from the written paper and oral presentation are added together, they will be broken by determining which team has the higher rank in the **oral presentation**.
6. Teams will be ranked according to the points awarded to their paper. This ranking will be used to seed the round robin quiz matches.
7. Teams will be divided into divisions and play a Round Robin type quiz tournament on Saturday, with every team playing every other team in their division. Teams earn two points for a win, one point for a tie and zero points for a loss.
8. At the end of the Round Robin tournament each team's quiz score is totaled and multiplied by a weighting factor in order to make the quiz score worth 60% of their seeding score. This is combined with their Research Project score which makes up 40% of the seeding score. The seeding scores are used to seed the Tsunami Bowl final championship and consolation brackets.

An example is shown below:

| <i>Team Name</i> | <i>Total RR Score</i> | <i>RR Seed Pts (RR points X 37.5)</i> | <i>Paper Score</i> | <i>Oral Pres. Score</i> | <i>Project Score</i> | <i>Total Seed Score</i> |
|------------------|-----------------------|---------------------------------------|--------------------|-------------------------|----------------------|-------------------------|
| <i>Seastars</i> | <i>8</i> | <i>300</i> | <i>100</i> | <i>100</i> | <i>200</i> | <i>500</i> |
| <i>Sharks</i> | <i>6</i> | <i>225</i> | <i>80</i> | <i>70</i> | <i>150</i> | <i>375</i> |
| <i>Salps</i> | <i>4</i> | <i>150</i> | <i>85</i> | <i>90</i> | <i>175</i> | <i>325</i> |
| <i>Gyres</i> | <i>2</i> | <i>75</i> | <i>70</i> | <i>60</i> | <i>130</i> | <i>205</i> |
| <i>Limpets</i> | <i>0</i> | <i>0</i> | <i>80</i> | <i>85</i> | <i>165</i> | <i>165</i> |

In this case there were five teams in the Round Robin Division, so each team played four quiz games. The maximum possible quiz score is eight (two points each for winning four games). The maximum possible Research project score is 200 (100 possible points for the written paper and 100 possible points for the oral presentation). To make the quiz be worth 60% of the seeding score and the research project worth 40% of the seeding score, the quiz score is multiplied by 37.5. ($8 \times 37.5 = 300$; 300 is 60% of 500 and 200 is 40% of 500). Seastars had a perfect paper, perfect oral presentation and won all their quiz matches.

9. Seeding points for teams in all divisions will be compared to seed the finals brackets. In the case of a tie the National Finals Competition tie-break procedure will be used in the following order:
 - i. Head to head won/loss record from the Round Robin games.
 - ii. Fewest losses of each team during the Round Robin games.
 - iii. Point differential as calculated by subtracting the total number of points scored against from the total number of points scored, with the greater point total receiving the higher seed.
 - iv. Total number of points scored with the greater point total receiving the higher seed.
 - v. A coin toss.
10. Teams can compete in the quiz bowl portion of the Tsunami Bowl without doing a project, or do a project and not compete in the quiz bowl. However, a team that does not complete the research project is not eligible to advance to the championship bracket, regardless of their seeding score.
11. Teams (which have completed the research project and competed in the quiz competition) with the top eight scores advance to the championship bracket and the next highest eight teams advance to the consolation bracket. If possible, the remaining teams will play each other in a Round Robin style tournament.
12. A team's place after the final quiz matches are played will determine their final place in the overall standings of the Tsunami Bowl.

Research Project Structure & Requirements

13. Final papers are due as an electronic file to **Marc Swanson** by **midnight December 1**. Please note that very large files are sometimes difficult to send by email and plan accordingly.

Address for submitting papers

Email electronic submissions to: mswanso1@alaska.edu

Paper copies of the written paper are not required.

Missing the deadline for the paper will result in a 5-point penalty, with an additional one-point reduction for each week the paper is late.

Paper judges will disregard any pages beyond the 15-page paper limit. (i.e. No references, tables, figures, or text beyond the 15-page limit will be considered in the scoring of the paper.)

14. Formatting for the written paper should follow the criteria listed below and on the “Document preparation guidelines” page of the Tsunami Bowl web site:
(<https://seagrant.uaf.edu/nosb/info/document-preparation-guidelines.php>)

Manuscript structure & scoring:

The first phase of the **Tsunami Bowl Research Project** includes a 15 page research report related to the topic provided by the research project coordinator. The Tsunami Bowl organizers recognize the benefits of hands-on learning. However, the Tsunami Bowl research paper should be more like a literature review than a description of an experimental science fair type project. The written report should follow these guidelines:

- Plagiarism of any material from any source will result in a score of zero for the report.
- Papers are to follow the American Psychological Association (APA) citation and format style. Helpful information is available on the Purdue Online Writing Lab web site (<http://owl.english.purdue.edu/owl/resource/560/01/>) and the APA web site blog & FAQ pages: (<http://blog.apastyle.org/apastyle/2014/09/best-of-the-apa-style-blog-2014-edition.html>)
- General paper format:
 - 12pt font
 - Double line spacing
 - 1” margins all around
- A few formatting guidelines specific to the Tsunami Research Paper may differ slightly from those of APA.
 - Figures and tables may be included within the document, near the relevant text instead of being placed after the reference section.
 - Two title pages are required. See below for specific instruction regarding title pages.
 - Headers are not required but, if used, should include only the title of the paper (no authors’ names).
- Page numbers – consecutive throughout the entire team submission
 - Page numbers begin on the first page of the document body (after the Abstract page).
 - Do not put page numbers on the title pages and the abstract
- Title pages
 - The first title page should contain the title of the paper, the authors’ names, the team name, the school name and address, and the coach’s name. Also include

the email address of the coach or contact person. It should also include this disclaimer: *"This paper was written as part of the Alaska Ocean Sciences Bowl high school competition. The conclusions in this report are solely those of the student authors."*

- The second title page should include only the title and paper abstract.
- Do not number the two title pages.
- Abstract
 - 200-250 words
 - Clearly state the question being asked.
 - Provide a concise summary of findings and conclusions.
- Figures and tables
 - Include at least one figure and one table.
 - Figures and tables may be included in the document near the text where they are discussed, or separately after the reference section.
 - Each figure must be referred to in the document text, be numbered and include a caption.
 - Graphs are a type of figure and must be referred to in the document text, be numbered and include a legend and caption.
 - Each table must be referred to in the document text, be numbered and include a legend and caption.
 - If using tables or figures from a source, cite the source according to APA style.
 - Figures and tables should be used to present information more clearly and/or in less space than sentence form would require.
 - Figures and tables should be understandable without referring to the document text.
- References
 - List all published materials referred to in the manuscript alphabetically by first author.
 - For full credit at least 10 primary sources must be cited.
 - Sources must be cited in the manuscript and in the Reference section according to APA style.
 - Follow the guidelines on the APA web site (<http://blog.apastyle.org/apastyle/2014/09/best-of-the-apa-style-blog-2014-edition.html>) and the Purdue OWL Citation Chart (https://owl.english.purdue.edu/media/pdf/20110928111055_949.pdf) *Note: The APA style is in the center section of the chart, between MLA and CMS styles.*
- Paper submission

- Research papers are due electronically to the Tsunami Bowl coordinator, Marc Swanson (mswanso1@alaska.edu) no later than **December 1**.
 - Manuscripts should be submitted in the form of a .pdf, Word or RTF document.
 - No paper copies are required.
 - Late manuscripts will be penalized. Missing the deadline for the paper will result in a 5-point penalty, with an additional one-point deduction for each week the paper is late.
 - Please contact research project coordinator Dean Stockwell or Tsunami Bowl coordinator Marc Swanson if there are extenuating circumstances which should be considered.
- Scoring
 - Papers will be scored by a panel of judges using the Tsunami Bowl research paper scoring rubric which is included at the end of these rules.
 - A diligent effort will be made to enlist judges willing to read and score all papers so that every paper will be scored by the same judges.
 - Paper judges will disregard any pages beyond the 15-page paper limit. (i.e. No references, tables, figures, or text beyond the 15-page limit will be considered in the scoring of the paper.)
 - Points from all the judges will be averaged and a final number of points will be assigned to the paper. (Any points for being late will be deducted from the final averaged value.)
 - The maximum score possible for a research paper is 100.
 - The paper scores will be used to seed the divisions for the Round Robin quiz competition, with higher and lower scoring teams divided as evenly as possible between the divisions.

15. Scores for the research paper will be available when teams check in for the Tsunami Bowl in Seward.

16. Oral presentations will be given in Seward at the Tsunami Bowl competition. The order of presentations will be determined by a random drawing. Presentations should follow the criteria listed below and on the Tsunami Bowl web site:

<https://seagrant.uaf.edu/nosb/info/oral-presentation-guidelines.php>

Oral presentation guidelines & scoring:

The second phase of the ***Tsunami Bowl Research Project*** includes a 20-minute oral presentation covering the topic of each team's research paper. This oral presentation will be presented to a panel of judges, the general public and the Tsunami Bowl participants in Seward on Friday and Saturday of the Tsunami Bowl. The order of presentations will be determined randomly by the Tsunami Bowl coordinator unless a team has a valid reason to request a specific time slot.

The oral presentation should follow these guidelines:

- Oral Presentation **Content** is worth **20%** of the score
 - Tell a convincing story or present a solid case for your conclusions.
 - Organize the main issues in a coherent manner.
 - Consider multiple disciplines of ocean sciences and socio-economic issues.
 - Demonstrate accurate knowledge of the topic and adequate research.
 - Address the content of the paper and cover the main issues of the project topic.
 - Integrate research results into the paper.
 - Cite all resources mentioned during the talk or shown in figures or tables correctly.
- **Balance of Speaking** is worth **10%** of the score. Speaking duties should be shared by all team members and the talk given in four or five equally important parts.
- **Delivery** is worth **20%** of the score.
 - Speak with a clear, strong voice.
 - Maintain good eye contact with the audience.
 - Use natural gestures showing confidence.
 - Use correct pronunciation.
 - Dress appropriately.
- **Organization** is worth **15%** of the score.
 - Arrange the main points of the talk and the visual aids logically in a coherent pattern.
 - Have a definite beginning and succinct ending.
 - Transitions between topics and speakers should be smooth.
- **Visual Aids** are worth **20%** of the score
 - Visual aids should be interesting to look at.
 - Visual aids should be easy to read and interpret.
 - Cite visual aids correctly and include appropriate labels.
 - Visual aids should fit well within the presentation.
- **Fielding Questions** is worth **15%** of the score.
 - All team members should be willing and eager to answer questions.
 - Show knowledge in subject areas related to the chosen topic.
 - Do your best to answer questions correctly.

- **Time:** Each team has 20 minutes to state their case or tell their story. If a team can adequately present the project in less time, there is no penalty. A time penalty is only assessed if a team is unable to present all their information within the allotted 20 minutes.
 - Teams will receive a visual warning by the timekeeper (the timekeeper will stand up) when they have 1 minute remaining and again when their time has expired (the timekeeper will sit down).
 - For the first minute, or any part of a minute, beyond the presentation time limit a team will be penalized 3 points and then 1 point for each additional minute or part of a minute.
 - After the team presentation is finished a total of ten minutes will be allotted for questions. Each judge will have the opportunity to ask a question before any questions will be taken from the general audience.
- **Scoring** of oral presentations:
 - Oral presentations will be scored by a panel of judges using the Tsunami Bowl oral presentation scoring rubric which is included at the end of these rules.
 - Points from all the judges will be averaged and a final number of points will be assigned to the oral presentation.
 - Time penalties will be assessed by the timekeeping judge and deducted from the oral presentation average score.
 - The maximum score possible for an oral presentation is 100.

The oral presentation score will be added to a team's paper score to determine the overall research project score and place in the research project component of the Tsunami Bowl (see rules #4 & #5).

18. If a team wishes to include previously recorded material (video or audio) as part of their oral presentation, it must not exceed 60 seconds in total length, and must present material that is difficult to describe verbally or with slides. Recorded material not meeting these specifications, in the opinion of the Project Coordinator, will result in a deduction of three points from the team's final oral presentation score.

Team Member Requirements

19. Once the research paper has been submitted, the composition of research project teams must remain static.
20. For teams competing in both the research project and quiz bowl portions of the Tsunami Bowl, the quiz bowl team must consist of the same students that completed the research project. If enough students that did the research paper are not able to come to Seward for the oral presentations and quiz bowl (i.e. at least four students), a new, quiz-only team should be formed for the quiz bowl portion of the competition.
21. Once the competition day has started the composition of quiz-only teams must remain static.

| Tsunami Bowl Research Paper Rubric - Ranking: 10 = best and 0 = worst - Any indication of plagiarism will result in a total paper score of zero | | | | | | |
|---|---|--|---|--|---|--|
| Paper format - 5% consider the following criterion: Paper follows APA formatting and Tsunami Bowl guidelines throughout, including citations. | 10 Paper follows APA formatting and Tsunami Bowl guidelines throughout, including citations. | 8 Only a few or minor formatting errors in paper or citations. | 6 Paper is formatted correctly but majority of citations are not in APA format. | 4 Citations are formatted correctly but paper does not follow APA & Tsunami Bowl guidelines. | 2 Many formatting errors in both paper and citations. | 0 None of the document formatting follows APA & Tsunami Bowl guidelines. |
| Figures and Tables - 5% consider the following 3 criteria: 1. At least one figure and one table must be included. 2. Figures and tables are used effectively. 3. Information is well collated in tables and figures. Tables, graphs and figures are referred to in the text and are clearly labeled. | 10 At least one figure and one table are included. Figures and tables clearly convey concepts that may be hard to express verbally. Figures and tables are referred to in the text and properly labeled. | 8 Missing one figure or table. The figure or table included is used effectively, referred to in the text and labeled correctly. | 6 Figures and tables not used effectively. Information could be better presented verbally. | 4 Figures and tables not labeled correctly or difficult to understand. | 2 Figures and tables not referred to in the text. | 0 No figures or tables included. |
| Title Pages - 2.5% consider the following 2 criteria: 1. Title is descriptive of question and work performed. 2. Formatting of both title pages follows Tsunami Bowl guidelines. | 10 Is descriptive of question and work performed. Paper includes 2 title pages, both properly formatted. | 8 Title is descriptive of question and work performed. Paper includes 2 title pages, but they are not properly formatted. | 6 Title gives only a general description of question and work performed. 2 title pages present, both properly formatted. | 4 Title gives only a general description of question and work performed. 2 title pages, but not properly formatted. | 2 Only one title page present. | 0 No title pages present. |
| Abstract - 5% consider the following 5 criteria: 1. Contains 200-250 words. 2. States clearly the question being asked & hypothesis is being tested. 3. Highlights most important findings and conclusions. 4. Includes enough information to understand research. 5. Is a concise summary of question and findings. | 10 States clearly question being asked in 200-250 words. Gives hypothesis being tested. Highlights most important findings with enough information to understand research. States major findings and conclusions. Is a concise summary of question and findings. | 8 Abstract includes all components of good abstract but is not well organized or concise. | 6 Is missing one component of good abstract. Abstract is not well organized or concise. | 4 Is missing two components of a good abstract. Does not give an overview that leads directly to the reader being able to state the major findings of the study. | 2 Is missing three or more components of a good abstract. Is not written in a scientific style. Includes references in abstract. | 0 Is not present. |
| Writing Style - 10% consider the following 5 criteria: 1. Paper is well organized. The beginning and end are well defined. There is good use of transitions. 2. The ideas and content are presented clearly. The central ideas and purposes are clear. 3. Details are given to enhance the central ideas and are presented in a captivating way. 4. The paragraphs are well developed. The writing style flows smoothly. 5. Writing conventions are met; correct grammar usage, punctuation and spelling. Good sentence structure. | 10 Paper is extremely well written and edited. The ideas and content are clearly articulated and there is good use of transitions. Details enhance the central ideas. | 8 Paper is well written. The ideas and content are presented clearly. Some details may be lacking. The paper was carefully edited and is free of jargon. | 6 The paper is fairly well drafted (flows well) and organized. Only a few details are provided. It could have used more editing - there are some spelling or grammar issues. | 4 The paper is not well organized and could have used a lot more editing, as there are a number of grammar, spelling and/or sentence structure mistakes. No details or inaccurate details are included. | 2 The paper is poorly written. Sentence structure, grammar and/or spelling errors create a document that is difficult to read and/or understand. | 0 The paper very poorly written with numerous grammatical and punctuation errors. |
| Originality - 2.5% consider the following 3 criteria: 1. The paper piques the reader's interest. 2. Practical, original ideas of the authors are presented. 3. The presentation of the information displays unique insights. | 10 Paper piques the reader's interest and makes the importance of the question real. Original, innovative and practical ideas of authors are present. Presentation of the information displays unique insights. | 8 Paper piques the reader's interest. Innovative and original ideas are presented but may not be practical. Presentation of the information displays unique insights. | 6 Although containing innovative or original ideas which may be practical, the paper does not hold the interest of the reader. | 4 Paper piques the reader's interest. Presentation of the information displays no unique insights. | 2 Paper piques the reader's interest but contains no original or innovative ideas or unique insights. | 0 Paper does not hold the interest of the reader or show any originality. |
| Incorporation of Research/Completeness - 25% consider the following 3 criteria: 1. Thorough review of peer-reviewed primary sources (Wikipedia and news papers are not primary sources.) 2. Incorporation of the various disciplines of ocean sciences. 3. Consideration of other sciences involved. | 10 Extensive use of research from many diverse sources. Other disciplines and sciences considered. At least 10 primary sources cited. | 8 Good use of research. Many resources from many different types. Other disciplines or sciences considered. 6 - 9 primary sources cited. | 6 Fair use of research. Several resources including a few different types. 4 - 6 primary sources cited. | 4 Some use of research including a few sources cited. | 2 Use of research limited to a few sources of all the same type. No primary sources cited. | 0 No evidence of research. |
| Issue Comprehension - 20% consider the following 3 criteria: 1. The document addresses the topic including relevant and socio-economic issues of the question. 2. The roles played by various ocean-related industries, community development, native cultures, and management agencies are addressed. Other potential aspects are discussed. 3. There is a clear common thread addressing the assigned topic throughout the entire paper. | 10 The paper thoroughly addresses the roles of various industries, cultures, agencies and communities. It addresses socio-economic and other potential issues. It is obvious that a lot of thought and research has gone into the synthesis of the material obtained. The paper clearly addresses the assigned topic. | 8 The paper generally addresses the roles of various industries, cultures, agencies and communities. It addresses some socio-economic issues. The paper clearly addresses the assigned topic. | 6 The paper successfully touches on multiple issues, but lacks depth into the issues. The roles of ocean-related communities is only addressed in very general terms. Paper generally addresses the assigned topic in most sections. | 4 Some issues are clearly presented, but there is only limited discussion of roles or any socio-economic issues that exist. Paper only marginally addresses the assigned topic. | 2 The paper is weakly developed and includes a few misunderstandings of the issues. Paper does not address the assigned topic. | 0 All information/facts provided are inaccurate. |
| Discussion/Recommendations/Conclusion - 25% consider the following 5 criteria: 1. The findings lead to the conclusions in a logical manner. 2. Strong evidence is given to support the conclusions. 3. The strength, direction and focus of the recommendations come from the information presented in the document. 4. The conclusions demonstrate some degree of creativity &/or innovation. 5. The main issues are addressed by the recommendations. | 10 Findings lead to conclusions in a logical manner. Strong evidence is given to support the conclusions. All the main issues are addressed by the recommendations. There is evidence of creativity & innovation in the conclusions reached. Recommendations address the main issues and are supported by information presented in the document. | 8 Findings lead to conclusions in a logical manner, however, some evidence given to support the conclusions is weak. Most of the main issues are addressed by the recommendations. The information presented in the paper supports the recommendations. | 6 Recommendations are directly based on information presented in the paper. Most of the main issues are addressed by the recommendations. Little evidence to support conclusions. | 4 Recommendations are loosely based on information presented in the paper. Only a few of the main issues are addressed by the recommendations. No information given to support conclusions. | 2 Made recommendations, but did not provide any supporting information OR made recommendations that were not supported by information in the paper. Conclusions were not backed by evidence. | 0 Did not provide specific recommendations or reach any logical conclusions |

Research Project Oral Presentation Rubric

Team & School name:

| Content - 20% | possible points | points awarded |
|---|------------------------|-----------------------|
| 1. Oral presentation content aligns with project topic. | 2 | |
| 2. Content of paper is thoroughly addressed & main issues of project are well covered. | 2 | |
| 3. Multiple disciplines of ocean sciences & socio-economic issues are considered. | 3 | |
| 4. Accurate knowledge of topic is demonstrated. | 3 | |
| 5. Presentation reflects adequate research | 2 | |
| 6. Research results are well integrated into the talk. | 2 | |
| 7. All resources are correctly cited. | 2 | |
| 8. The main issues are organized in a coherent manner. | 2 | |
| 9. The speakers' case is solid or their story is convincing | 2 | |
| Delivery - 20 % | | |
| 1. Students speak with a clear, strong voice. | 5 | |
| 2. Speakers maintain good eye contact with audience. | 5 | |
| 3. Speakers gesture naturally showing confidence. | 4 | |
| 4. Speakers are dressed appropriately. | 3 | |
| 5. Speakers use correct pronunciation. | 3 | |
| Organization - 15 % | | |
| 1. Material and visual aids in presentation are arranged and presented logically with the main points following a coherent pattern. | 5 | |
| 2. There is a definite beginning and succinct ending. | 5 | |
| 3. Transitions between topics and speakers are smooth. | 5 | |
| Visual Aids - 20 % | | |
| 1. Visual aids easily hold the audience's attention. | 5 | |
| 2. Visuals are big enough to read and easy to interpret. | 5 | |
| 3. Visuals are complete with correct citations, captions and x & y axes labeled. | 5 | |
| 4. Visuals are well integrated into the presentation. | 5 | |
| Balance of Speaking - 10 % | | |
| 1. Speaking duties are shared equally by all team members. | 5 | |
| 2. Talk is given in four or five equally important parts. | 5 | |
| Fielding Questions - 15 % | | |
| 1. All team members are willing to address the topic of the questions and show knowledge in areas related to their chosen topic. | 5 | |
| 2. Students appear eager to answer questions. | 5 | |
| 3. Questions are answered correctly. | 5 | |

****Each team has 20 minutes to state their case or tell their story. If a team can adequately present the project in less time, there is no penalty. A time penalty is only assessed if a team is unable to present all their information within the allotted 20 minutes. For the first minute beyond the presentation time limit a team will be penalized 3 points, and then 1 point for each additional minute. Time penalties will be assessed by the time keeping judge .**