2015 Alaska Tsunami Bowl

INTRODUCTION & INSTRUCTIONS

The Alaska Region National Ocean Sciences Bowl competition, also known as the Tsunami Bowl, is comprised of two components: a research project and quiz matches.

The Research project component to the Alaska Tsunami Bowl competition is designed to expand learning beyond the classroom and involve students with elders and scientists in their communities and throughout the state. The project (like success in ocean sciences) requires an interdisciplinary team effort, the ability to assimilate and prioritize large quantities of often-conflicting results, and the ability to persuasively communicate the results and benefits of the research. These skills will serve the students well regardless of what they decide to do after high school. From a practical standpoint, these skills and contacts can be valuable to students as they consider college and their future career plans.

In the quiz competition, students must be the first to “buzz-in” for the opportunity to answer a multiple-choice or short-answer question. The game is organized as a series of matches in a round-robin/double-elimination format. In each match, two teams compete against each other and the clock, trying to be the fastest to answer the toss-up questions. Team challenge questions, more complex questions which require critical analysis and written answers, test students’ critical thinking skills.

The goal of this competition is to recognize and reward excellence among students interested in ocean studies. The bowl also aims to encourage high school students, their teachers and parents to increase their knowledge of the oceans and to broaden awareness of the critical value of ocean research.

COMPONENTS OF THE TSUNAMI BOWL RESEARCH PROJECT

The 2015 Tsunami Bowl Research Project consists of two key elements -- a written document that the teams will write and submit prior to the Tsunami Bowl and an oral presentation that the team will present to fellow participants and a panel of judges during the competition in Seward. We recommend all teams and coaches review these instructions carefully.

The 2015 Tsunami Bowl Research Project score will be combined with the score earned in the Saturday Round Robin Quiz competition to determine seeding of the Sunday elimination quiz brackets.

The Tsunami Bowl Research Project topic that all the teams will focus on will be provided after September 1. The release of the topic at that time ensures that all teams are on a level-playing field, no matter when they start their school year.

PART I. Research Report

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 website (http://owl.english.purdue.edu/owl/resource/560/01/) and the APA website 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, Phyllis Shoemaker (phyllis.shoemaker@alaska.edu) no later than December 1, 2014.
  • 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 Phyllis Shoemaker if there are extenuating circumstances which should be considered.

• Scoring
  • Papers will be scored by a panel of judges using the 2015 Tsunami Bowl research paper scoring rubric.
  • 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.)
  • 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.

PART 2. Oral presentation
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 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 timekeeping judge.

• After the team presentation is finished or time has ended, 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 2015 Tsunami Bowl oral presentation scoring rubric.
  - 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.

**TSUNAMI BOWL QUIZ MATCHES** *(All quiz matches will be played according to the most recent version of the official NOSB rules)*

**Saturday Round Robin Quiz matches**

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.

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:

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

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 X 37.5 = 300; 300 is 60% of 500 and 200 is 40% of 500). Seastars had a perfect paper, oral presentation and won all their quiz matches.

Seeding points from 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.

Teams 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 with play each other in a Round Robin style tournament. A team’s place after the final quiz matches are played will determine their final place in the overall standings of the Tsunami Bowl.

The Tsunami Bowl research topic will be released to the coaches and teams after September 1. Questions may be sent to the Tsunami Bowl research project coordinator, Dean Stockwell (dastockwell@alaska.edu) or the Tsunami Bowl regional coordinator, Phyllis Shoemaker (phyllis.shoemaker@alaska.edu).

DATES TO REMEMBER:

Tsunami Bowl “Intent to Participate” form deadline: November 15, 2014
Tsunami Bowl Research Project Deadline: December 1, 2014
Team Registration Deadline: January 10, 2015
Ocean Connection Art Show entry deadline: art must be received at the Tsunami Bowl check-in site before 8 pm on February 5, 2015
2015 Alaska Tsunami Bowl dates: February 6 – 8, 2015 at Seward High School