Biomedical Debate

Dress Code		Official HOSA uniform or business professional attire
SLC Orientation		Event explained to the competitors and individual timecards handed out. Students will return to the event room at least 5 minutes before their allotted time.
Team Numbers		Teams will consist of 3-4 people
Round # 1 Online Test		Competitors will take an online test during the testing window. Combined team scores will be used to seed teams into Round 2 of the competition. Advisors will be informed of which competitors have moved on from Round 1 to qualify to participate in Round 2 at SLC.
Round # 2 (The Debate)		- Topic: "Should Artificial Intelligence in Healthcare be Welcomed or Feared?" - It is the responsibility of the competitor to manage their time when speaking.
Scoring		Scores from Round One will ONLY be used to seed teams into Round Two and will not be used to calculate the final score.

Event Summary

Biomedical Debate provides members with the opportunity to use debate as a platform for researching the pros and cons of a biomedical issue and showcasing what has been learned. This competitive event consists of 2 rounds and each team consists of 3-4 people. Team members will participate in the Round One written test containing questions about the annual biomedical topic. The teams with the highest average score from the test will qualify for the Round Two debate(s). This event aims to inspire members to be proactive future health professionals by researching a given health topic, evaluating, discussing, and thinking critically about the issue, and refining verbal communication skills surrounding a complex biomedical issue.

2023 – 2024 Topic:
Should Artificial Intelligence in Healthcare be Welcomed or Feared?

Official References

Competitors are encouraged to learn as much as they can about the annual topic. All test questions will be developed from the following references:

A. Gunatilleke, N.J. (2022). *Artificial intelligence in healthcare; Unlocking its potential*. Janak Gunatilleke. (*Note this is a printed book).

B. Jain, A., Pathak, A. (2023). *Artificial intelligence and its transformative impact on healthcare.* Aakash Jain. (*Note this is a printed book).

C. Tyson, A., Giancarlo, P., Spencer, A. and Funk, C. (2023, February 22). *60% of Americans would be uncomfortable with provider relying on AI in their own health care.* Pew Research https://www.pewresearch.org/science/2023/02/22/60-of-americans-would-be-uncomfortable-with-provider-relying-on-ai-in-their-own-health-care/.

D. Horowitz, B. (2022, December 16). *The current state of AI in healthcare and where it's going in 2023.* Health Tech. https://healthtechmagazine.net/article/2022/12/ai-healthcare-2023-ml-nlp-more-perfcon.

E. Kahn, B., Fatima, H., Qureshi, A., Kumar, S., Hanan, A., Hussain, J. Abdullah, S. (2023, February). *Drawback of artificial intelligence and their potential solutions in the healthcare sector.* National Library of Medicine. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9908503/

F. Health IT Analytics.com. (2022, March 02). *Arguing the pros and cons of artificial intelligence in healthcare.* Health IT Analytics. https://healthitanalytics.com/news/arguing-the-pros-and-cons-of-artificial-intelligence-in-healthcare

ROUND ONE: The Test

Round One Test Instructions: Each team will be evaluated in Round One by a fifty (50) item multiple choice written test. Competitors will be given sixty (60) minutes to complete the test. Test will be taken during the online testing window.

ROUND TWO – DEBATE ROUND

- The number of teams selected for Round Two is determined by the number of entries and overall conference capacity.

    A. Debate pairings will be posted at a designated time and place.
    B. This event requires a paired match-up. If a team is more than 5 minutes late to their round two appointed time, the team forfeits their right to compete in accordance with the GRRs.
- Teams will be permitted to bring prepared materials (Containers/folders with notes, printed pages, books and bound materials) to the debate area in *hard copy only*. Props will NOT be allowed.

- Debate teams will draw for the affirmative or negative immediately upon entering the competition room. Teams will have two (2) minutes to prepare for the debate

- The following specific pattern will be followed during the debate:

    A. **First Affirmative Speaker** (2 minutes). The speaker for the affirmative presents their arguments.
        - 30 second transition time

    B. **First Negative Speaker** (2 minutes). The speaker for the negative presents their response to the affirmative speaker's arguments.
        - 30 second transition time

    C. **Second Negative Speaker** (2 minutes). The second speaker for the negative presents their argument
        - 30 second transition time

    D. **Second Affirmative Speaker** (2 minutes). The second speaker for affirmative responds to the negative speaker's argument.
        - 30 second transition time

    E. **Negative Summary/Rebuttal Speaker** (2 minutes). The negative speaker presents conclusion.
        - 30 second transition time

    F. **Affirmative Summary/Rebuttal Speaker** (2 minutes). The affirmative speaker presents conclusion.

        ** Thirty (30) seconds transition time will be allowed between each part of the debate to allow teams to discuss strategy and for judges to rate the prior performance. ⅃

    * The full time noted above will be provided. If a team chooses not to use any or all of the time allowed, the opposing team shall still have the full amount of time that would have passed. However, the team whose turn it is may choose to begin their segment of the debate when ready, and the timekeeper will give them the amount of time listed above. (A team does not receive extra time for starting early.)

    ** There will not be a time warning given during the debate components. It is the responsibility of the competitor to manage their time when speaking.

- A timekeeper will keep time for each part of the debate and will call time at the end of the maximum amount of time allowed. Speakers must immediately stop speaking when time is called.

- Teams are permitted to discuss and write notes during all parts of the debate, however, table decorum will be evaluated on the rating sheet with the intent that teams will conduct themselves in a professional manner without distracting the other team. Paper is allowed for note taking.

- At least three (3) team members must speak in the debate.

Competitors Must Provide
- ☐ Prepared topic materials for the presentation round in hard copy only
- ☐ Watch with second hand (optional-Round Two only)
- ☐ Paper or index cards, to use for note taking by team members (optional)

BIOMEDICAL DEBATE
ROUND TWO – **RATING SHEET**

Section # _____   Judge's Signature _____
Team # _____   Division: SS ____ PS ____

1. First Affirmative Speech

	Excellent 10 points	Good 8 points	Average 6 points	Fair 4 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
A. Arguments & Evidence (Persuasiveness)	The arguments & evidence clearly expresses the team's viewpoint in a highly persuasive manner.	The arguments & evidence mostly expresses the team's viewpoint and provides responses that are persuasive.	The arguments & evidence somewhat express the team's viewpoint and provides moderately persuasive responses.	The arguments & evidence are slightly persuasive.	The arguments are not persuasive or there is not an argument presented		

	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
B. Flow & Logic of speech	The content of the speech flows smoothly, is thoughtfully constructed and makes logical sense.	The content of the speech flows smoothly and makes sense.	The speech flows moderately smoothly and makes sense most of the time.	The speech has an inconsistent flow and makes sense some of the time.	The speech does not flow or make logical sense.		
C. Relevance of arguments	All arguments were accurate, relevant and strong. Was able to defend position.	Majority of arguments were accurate, relevant and strong. Was able to defend position.	Some of the arguments were accurate, relevant and strong. Was somewhat able to defend position.	Arguments were not accurate and/or relevant. Was unable to defend position.	No arguments were made. Unable to defend position.		

2. First Negative Speech

	Excellent 15 points	Good 12 points	Average 9 points	Fair 6 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
A. Arguments & Evidence	All counterarguments were accurate, relevant and strong. Was able to accurately defend position.	Majority of counterarguments were accurate, relevant and strong. Was able to defend position.	Some of the counterarguments were accurate, relevant and strong. Was somewhat able to defend position.	Counterarguments were not accurate and/or relevant. Was unable to defend position.	No counterarguments were made. Unable to defend position.		

3. Second Negative Speech

	Excellent 10 points	Good 8 points	Average 6 points	Fair 4 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
A. Arguments & Evidence (Persuasiveness)	The arguments & evidence clearly expresses the team's viewpoint in a highly persuasive manner.	The arguments & evidence mostly expresses the team's viewpoint and provides responses that are persuasive.	The arguments & evidence somewhat express the team's viewpoint and provides moderately persuasive responses.	The arguments & evidence are slightly persuasive.	The arguments are not persuasive or there is not an argument presented		

	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
B. Flow & Logic of speech	The content of the speech flows smoothly, is thoughtfully constructed and makes logical sense.	The content of the speech flows smoothly and makes sense.	The speech flows moderately smoothly and make sense most of the time.	The speech has an inconsistent flow and makes sense some of the time.	The speech does not flow or make logical sense.		
C. Relevance of arguments	All arguments were accurate, relevant and strong. Was able to defend position.	Majority of arguments were accurate, relevant and strong. Was able to defend position.	Some of the arguments were accurate, relevant and strong. Was somewhat able to defend position.	Arguments were not accurate and/or relevant. Was unable to defend position.	No arguments were made. Unable to defend position.		

4. Second Affirmative Speech

	Excellent 15 points	Good 12 points	Average 9 points	Fair 6 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
A. Arguments & Evidence	All counterarguments were accurate, relevant and strong. Was able to accurately defend position.	Majority of counterarguments were accurate, relevant and strong. Was able to defend position.	Some of the counterarguments were accurate, relevant and strong. Was somewhat able to defend position.	Counterarguments were not accurate and/or relevant. Was unable to defend position.	No counterarguments were made. Unable to defend position.		

5. Negative Summary/Rebuttal Speech

	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
A. Evidence and effectiveness	The negative rebuttal was clear and highlighted the point of view with confidence.	The negative rebuttal was effective	The evidence used in the negative rebuttal was mediocre.	Not enough evidence was used in the negative rebuttal.	No evidence was provided in the negative rebuttal.		
B. Clarification of argument	The negative rebuttal was clear and significantly strengthened the affirmative point of view	N/A	The negative rebuttal reiterated the position but did not add anything to the argument.	N/A	No negative rebuttal was provided.		
C. Relevance of rebuttal	Rebuttal was articulately stated and offered strong relevant, researched data to support the argument.	The rebuttal offered good research and supported the argument.	The rebuttal offered mediocre researched data to support the argument.	Little relevancy was offered in the rebuttal. More data/supporting information needed to support the point.	No rebuttal was offered or the rebuttal was not relevant to the topic.		

6. Affirmative Summary/Rebuttal Speech

	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
A. Evidence and effectiveness	The affirmative rebuttal was clear and highlighted the point of view with confidence.	The affirmative rebuttal was effective.	The evidence used in the affirmative rebuttal was mediocre.	Not enough evidence was used in the affirmative rebuttal.	No evidence was provided in the affirmative rebuttal.		
B. Clarification of argument	The affirmative rebuttal was clear and significantly strengthened the affirmative point of view	N/A	The affirmative rebuttal reiterated the position but did not add anything to the argument.	N/A	No affirmative rebuttal was provided.		

	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
C. Relevance of rebuttal	Rebuttal was articulately stated and offered strong relevant, researched data to support the argument.	The rebuttal offered good research and supported the argument.	The rebuttal offered mediocre researched data to support the argument.	Little relevancy was offered in the rebuttal. More data/supporting information needed to support the point.	No rebuttal was offered or the rebuttal was not relevant to the topic.		

7. Overall Debate Qualities (AFFIRMATIVE)

	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
A. Voice Pitch, tempo, volume, quality	Each competitor's voice was loud enough to hear. The competitors varied rate & volume to enhance the speech. Appropriate pausing was employed.	Each competitor spoke loudly and clearly enough to be understood. The competitors varied rate OR volume to enhance the speech. Pauses were attempted.	Each competitor could be heard most of the time. The competitors attempted to use some variety in vocal quality, but not always successfully.	Judges had difficulty hearing /understanding much of the speech due to little variety in rate or volume.	The competitor's voice is too low or monotone. Judges struggled to stay focused during the majority of presentation.		
B. Stage Presence Poise, posture, eye contact, and enthusiasm	Movements & gestures were purposeful and enhanced the delivery of the speech and did not distract. Body language reflects comfort interacting with audience. Facial expressions and body language consistently generated a strong interest and enthusiasm for the topic.	The competitors maintained adequate posture and non-distracting movement during the speech. Some gestures were used. Facial expressions and body language sometimes generated an interest and enthusiasm for the topic.	Stiff or unnatural use of nonverbal behaviors. Body language reflects some discomfort interacting with audience. Limited use of gestures to reinforce verbal message. Facial expressions and body language are used to try to generate enthusiasm but seem somewhat forced.	Most of the competitor's posture, body language, and facial expressions indicated a lack of enthusiasm for the topic. Movements were distracting.	No attempt was made to use body movement or gestures to enhance the message. No interest or enthusiasm for the topic came through in presentation.		
C. Diction*, Pronunciation** and Grammar	Delivery emphasizes and enhances message. Clear enunciation and pronunciation. No vocal fillers (ex: "ahs," "uh/ums," or "you-knows"). Tone heightened interest and complemented the verbal message.	Delivery helps to enhance message. Clear enunciation and pronunciation. Minimal vocal fillers (ex: "ahs," "uh/ums," or "you-knows"). Tone complemented the verbal message	Delivery adequate. Enunciation and pronunciation suitable. Noticeable verbal fillers (ex: "ahs," "uh/ums," or "you-knows") present. Tone seemed inconsistent at times.	Delivery quality minimal. Regular verbal fillers (ex: "ahs," "uh/ums," or "you-knows") present. Delivery problems cause disruption to message.	Many distracting errors in pronunciation and/or articulation. Monotone or inappropriate variation of vocal characteristics. Inconsistent with verbal message.		

	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
D. Decorum, professional behavior toward other team	All statements and responses were respectful and appropriate. Decorum was professional toward the other team.	N/A	Most statements and responses were respectful. Seldom interrupted or talked over other team members.	N/A	Decorum was not professional. Statements and responses were consistently not respectful. Interrupted or talked over other team members.		

	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
E. Team Participation	Excellent example of shared collaboration. Three team members spoke and carried equal parts of the debate.	All but one person on the team was actively engaged in the debate,	The team worked together relatively well. Some team members spoke more than others.	The team did not work effectively together.	One team member dominated the debate.		

8. Overall Debate Qualities (NEGATIVE)

	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
A. Voice Pitch, tempo, volume, quality	Each competitor's voice was loud enough to hear. The competitors varied rate & volume to enhance the speech. Appropriate pausing was employed.	Each competitor spoke loudly and clearly enough to be understood. The competitors varied rate OR volume to enhance the speech. Pauses were attempted.	Each competitor could be heard most of the time. The competitors attempted to use some variety in vocal quality, but not always successfully.	Judges had difficulty hearing /understanding much of the speech due to little variety in rate or volume.	The competitor's voice is too low or monotone. Judges struggled to stay focused during the majority of presentation.		
B. Stage Presence Poise, posture, eye contact, and enthusiasm	Movements & gestures were purposeful and enhanced the delivery of the speech and did not distract. Body language reflects comfort interacting with audience. Facial expressions and body language consistently generated a strong interest and enthusiasm for the topic.	The competitors maintained adequate posture and non-distracting movement during the speech. Some gestures were used. Facial expressions and body language sometimes generated an interest and enthusiasm for the topic.	Stiff or unnatural use of nonverbal behaviors. Body language reflects some discomfort interacting with audience. Limited use of gestures to reinforce verbal message. Facial expressions and body language are used to try to generate enthusiasm but seem somewhat forced.	Most of the competitor's posture, body language, and facial expressions indicated a lack of enthusiasm for the topic. Movements were distracting.	No attempt was made to use body movement or gestures to enhance the message. No interest or enthusiasm for the topic came through in presentation.		
C. Diction*, Pronunciation** and Grammar	Delivery emphasizes and enhances message. Clear enunciation and pronunciation. No vocal fillers (ex: "ahs," "uh/ums," or "you-knows"). Tone heightened interest and complemented the verbal message.	Delivery helps to enhance message. Clear enunciation and pronunciation. Minimal vocal fillers (ex: "ahs," "uh/ums," or "you-knows"). Tone complemented the verbal message	Delivery adequate. Enunciation and pronunciation suitable. Noticeable verbal fillers (ex: "ahs," "uh/ums," or "you-knows") present. Tone seemed inconsistent at times.	Delivery quality minimal. Regular verbal fillers (ex: "ahs," "uh/ums," or "you-knows") present. Delivery problems cause disruption to message.	Many distracting errors in pronunciation and/or articulation. Monotone or inappropriate variation of vocal characteristics. Inconsistent with verbal message.		

	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
D. Decorum, professional behavior toward other team	All statements and responses were respectful and appropriate. Decorum was professional toward the other team.	N/A	Most statements and responses were respectful. Seldom interrupted or talked over other team members.	N/A	Decorum was not professional. Statements and responses were consistently not respectful. Interrupted or talked over other team members.		
	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE - A	JUDGE SCORE - N
E. Team Participation	Excellent example of shared collaboration. Three team members spoke and carried equal parts of the debate.	All but one person on the team was actively engaged in the debate.	The team worked together relatively well. Some of the team members had little participation.	The team did not work effectively together.	One team member dominated the debate.		

9.Overall Debate Winner

	10 points				0 points	JUDGE SCORE - A	JUDGE SCORE - N
Debate Winner	10 points awarded to the winner of the debate.	N/A	N/A	N/A	0 points awarded to the losing debate team		
					AFFIRMATIVE TOTAL POINTS (85):		
					NEGATIVE TOTAL POINTS (85):		

*Definition of Diction – Choice of words especially with regard to correctness, clearness, and effectiveness.

**Definition of Pronunciation – Act or manner of uttering officially.

BIOMEDICAL DEBATE
BRACKET SUMMARY SCORESHEET

Due to the bracketed nature of this round two event, this Summary Scoresheet will be used to calculate the total judge scores for the Affirmative and Negative Teams in each paired matchup. Each judge score should be recorded below, and then the team's average score calculated. The team with the highest average score will be deemed the winner of the paired matchup and will advance to the next paired matchup, following the schedule of the posted bracket.

Round: _____   Section _____   AFFIRMATIVE = TEAM ID # _____   NEGATIVE = TEAM ID # _____

AFFIRMATIVE TEAM ID	JUDGE #1 SCORE	JUDGE #2 SCORE	JUDGE #3 SCORE	TOTAL AVERAGE SCORE FOR AFFIRMATIVE

NEGATIVE TEAM ID	JUDGE #1 SCORE	JUDGE #2 SCORE	JUDGE #3 SCORE	TOTAL AVERAGE SCORE FOR NEGATIVE

WINNING TEAM   (check one)

Affirmative Team_____

Negative Team

Winning Team = ID# _____

Judge's Printed Name and Signature:_____

Biomedical Debate Seeding Chart for 8 Teams
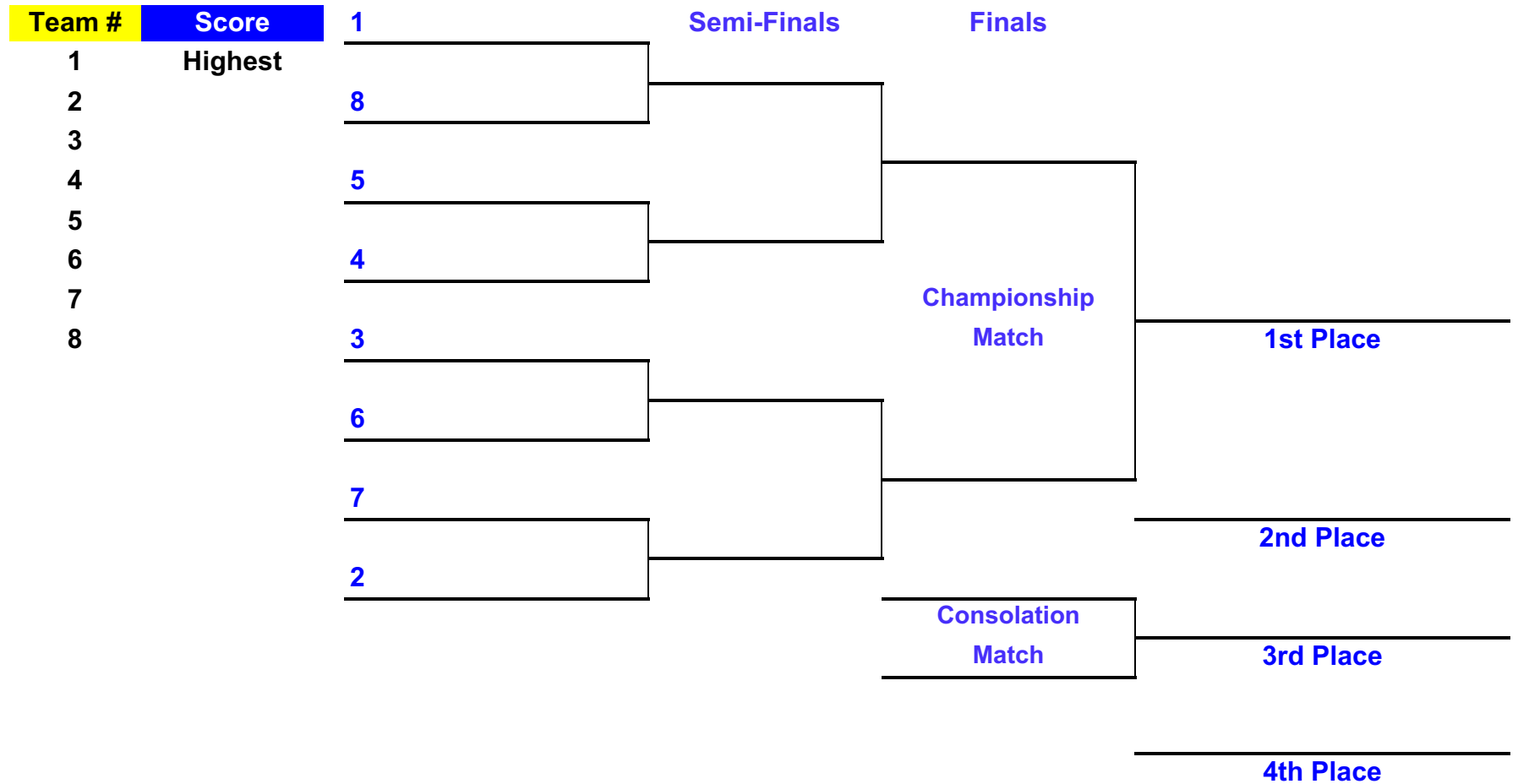
Team #	Score
1	Highest
2	
3	
4	
5	
6	
7	
8	

Semi-Finals

Finals

1

8

5

4

3

6

7

2

Championship Match

1st Place

2nd Place

Consolation Match

3rd Place

4th Place

Instructions: Add the scores of team members to arrive at a team total, and then divide by the number of team members to get the team average. Sort team averages from highest to lowest scores. The team with the highest score after the test is seeded #1, the team with the next highest score is seeded #2, and so on until the chart is filled with the top 8 teams.

Note: The electronic version of the Biomedical Debate seeding process is available at the CE Useful Tools page.

Biomedical Debate Seeding Chart for 16 Teams

Team	Score
1	Highest
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Semi-Finals   Finals

1
16

9
8

5
12

13
4

Championship Match

1st Place

3
14

11
6

7
10

15
2

2nd Place

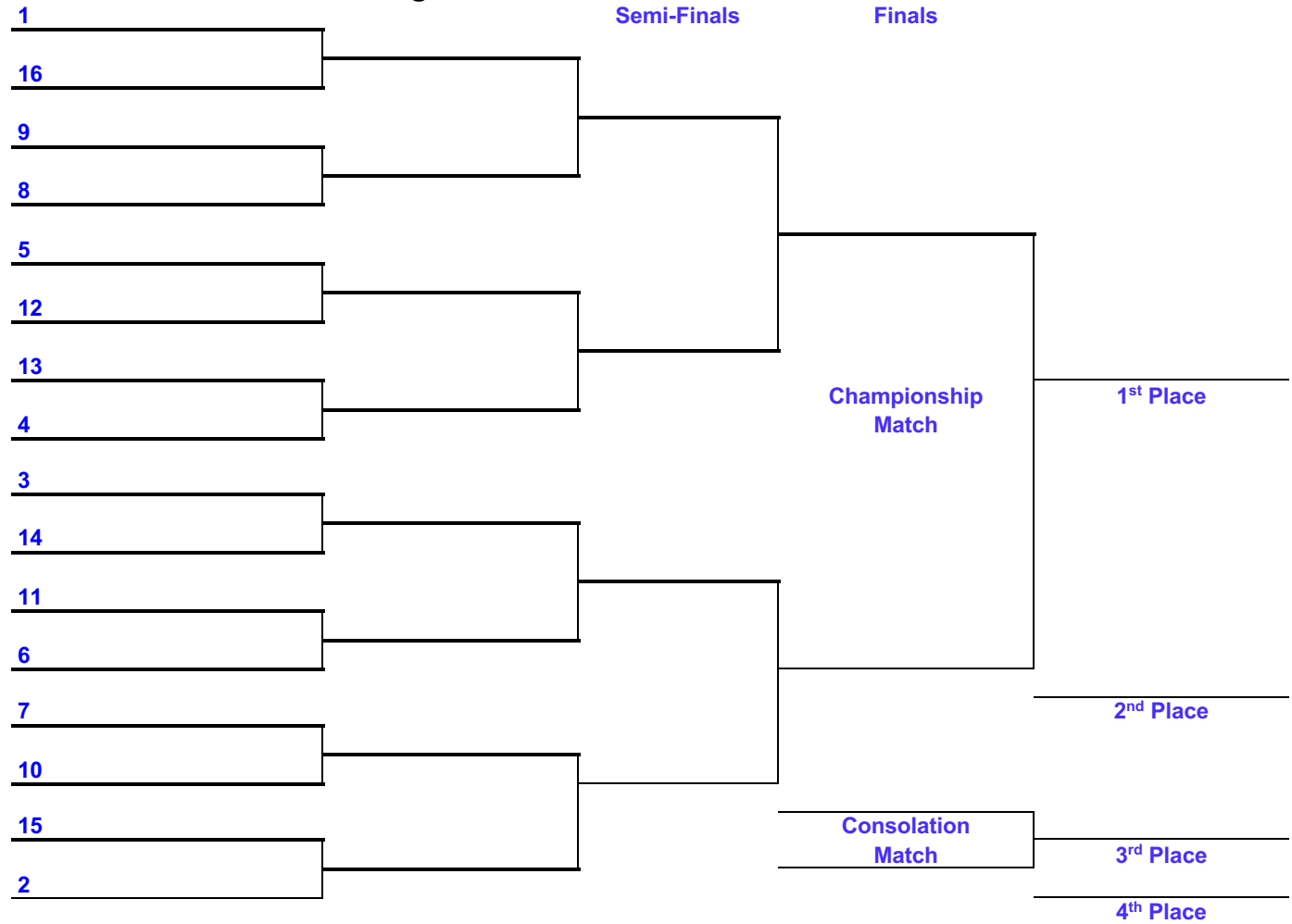**Consolation Match**

3rd Place

4th Place

Instructions: Add the scores of team members to arrive at a team total, and then divide by the number of team members to get the team average. Sort team totals from highest to lowest scores. The team with the highest score after the test is seeded #1, the team with the next highest score is seeded #2, and so on until the chart is filled with the top 16 teams. The winners of each bracket play for 1st and 2nd place, the winner of the consolation match is the 3rd place team.

Note: The electronic version of the Biomedical Debate seeding process is available at the CE Useful Tools page.

Biomedical Debate Seeding Chart for 32 Teams

Team	Score
1	Highest
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	

Semi-Finals **Finals** **Semi-Finals**

Left bracket seeds (top to bottom): 1, 32, 17, 16, 9, 24, 25, 8, 5, 28, 21, 12, 13, 20, 29, 4

Right bracket seeds (top to bottom): 2, 31, 18, 15, 10, 23, 26, 7, 6, 27, 22, 11, 14, 19, 30, 3

Championship Match for 1st & 2nd

The two teams who did not make it to the Championship match play in the consolation match

1st Place

2nd Place

3rd Place

4th Place

Consolation

Blank page