

UofU Siam Chapter: 2024 Modeling Competition Rules

I. Forming Teams

- A. Teams will consist of up to three (3) undergraduate students currently enrolled at the University of Utah. Participants do not need to be in a specific major and are encouraged to form teams with a diverse set of knowledge.
- B. It is recommended that students have taken, or are currently in, Calculus 3 to participate.
- C. If you would like to participate, please fill out the Google registration form [here](#).
- D. Individual entires are welcome, and we will do our best to place students on teams with others at a similar level of mathematical experience.

II. Rules

- A. The competition will be begin at 5 PM MST on November 15th, and submission are due at 11:59 PM MST on November 18.
- B. During the completion, teams may not receive live assistance from outside of their team. This includes seeking assistance via message boards, support websites, etc. Teams may use any previously posted material (i.e., academic articles, books, webpages), but they must be appropriately referenced in the final solution and cited.
- C. Solutions must be submitted as a single PDF and can be handwritten, typeset, or a combination of the two. Any handwritten parts must be legible.
- D. There is no strict page limitation, as the length of handwritten solutions may vary. However, solutions should in principle fit in a 5-page typed document with 12-point fond and standard margins.

III. During the Competition

- A. The problem will be made available at 5 PM MST on November 15th on the University of Utah SIAM chapter's website.
- B. Alongside the problem, some recommended resources will be included.
- C. Specific resources will be highlighted for students who expect to take a calculus-based approach to the problem.
- D. Solutions should consist of three parts: a summary, a model, and a page of citations.
- E. The summary should be written last and contain an overview of the team's findings. It should also provide a clear recommendation as it pertains to the prompt.

- F. The model selection should include any derivations, computations, and other discussions.
- G. Teams are encouraged to make simplifying assumptions where necessary.
- H. We recommend citations be in the AMS style, but any citation style is fine as long the original source can be found with the included information.

IV. Evaluation

- A. Students will be evaluated by graduate student members of the University of Utah SIAM chapter.
- B. Solutions will be judged on three (3) criteria: clarity, soundness, and creativity.
- C. Judges will prefer full solutions that are effectively able to incorporate all information provided in the problem statement. Solutions that make simplifying assumptions will be preferred over partial solutions and those that incorporate superfluous information for their model.

V. Sample Problems

- A. We suggest looking at previous problems from other competitions. Some examples are provided below:
 1. <https://www.contest.comap.com/undergraduate/contests/mcm/previous-contests.php>
 2. <https://www.contest.comap.com/highschool/contests/himcm/previous%20problems.html>