# Beyond Academia Olympiad 2025-26 Rules Manual

# BEYOND ACADEMIA OLYMPIAD RULES MANUAL

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# **About the Competition**

Beyond Academia Olympiad (BAO) was founded in September of 2025 by two aspiring, high-achieving high school freshmen, with the intention of spreading their great love of learning in all fields to other students.

Having previously competed in Science Olympiad, these two ambitious students were no newcomers to the fire of competition and the late, sleepless nights, and in devoting most of their time to competition, they were successful in their endeavors. Science Olympiad was designed specifically for those that were invested in STEM and only had events based in science. However, they realized that STEM was not for everyone and was oftentimes highly demanding, and wanted to broaden the idea of Science Olympiad – so they came up with a similar olympiad, one that encompassed everything from science to music to designer products.

Coming from two very different standpoints and majors, BAO is a beautiful mélange of liberal arts and sciences and surely you can find an event of your interest here! Events have been authored by the two creators of BAO themselves, basing the event ideas on their various passions, pursuits, and professions.

You can contact the event administrators on BAO's official website (<a href="https://zoeyrwang.github.io/bao/index.html">https://zoeyrwang.github.io/bao/index.html</a>) or on our official discord server (<a href="https://discord.gg/gAth5QGr">https://discord.gg/gAth5QGr</a>).

## **About the Founders**

### Sonya Duggal, Competition Director:

Sonya is an aspiring and goal-oriented freshman with a strong background in both the liberal arts and sciences. She has strong initiative and is a very driven individual that works hard in every field she encounters and there is no problem that can stunt her. She won 5th place in the Science Olympiad event Anatomy & Physiology at the New York state competition, the harvest of her months of hard work and dedication. Sonya is also the founder of the EcoVoices zine, a student-run magazine that accepts submissions from middle and high school students, with alternating seasonal themes to raise awareness about climate change and the impending environmental disasters the Earth suffers from. Even with all her extracurriculars, she is a splendidly stellar high school student as well and never ceases to amaze and perform well on tests, quizzes, and any exam in any course, a true role model to all aspiring students.

## Zoey Wang, Technical Lead & Advertising:

Zoey is a visionary and proactive freshman with great fervency for the sciences and interest in the liberal arts. She possesses no small amount of foresight and plans at least five steps ahead before she goes through with an action and is careful, astute, and calculating. While her performance in Science Olympiad is not as flashy or noteworthy as others, she is a strong computer programmer. Well-versed in C++, HTML, Javascript, and Python, she has competed in many coding competitions and has won distinguishing awards in the field of computer science. The BAO website was coded by Zoey with HTML, CSS, and Javascript. She is also a classically trained violinist with great passion for music and is currently practicing W.A. Mozart's Violin Concerto 3, 2nd movement.

## Alice in Wonderland

**<u>DESCRIPTION:</u>** Participants will be assessed on their understanding and familiarity of cooking techniques and the art of fine dining.

## A TEAM OF UP TO: 1

**APPROXIMATE TIME:** 40 minutes

#### **EXAM PARAMETERS:**

- a. Each participant may bring one (1) device to take the exam on.
- b. Each participant may employ the use of scrap paper.
- c. Each participant may bring one (1) stand-alone, non-programmable, non-graphing calculator.

**THE COMPETITION:** This Exam will be administered as online, all multiple-choice test. Content topics will include:

- 1. Key chemical reactions in gastronomy:
  - a. Maillard Reaction
  - b. Carmelization
  - c. Fermentation
  - d. Protein denaturization
  - e. Gluten formation
  - f. Acid-base reactions
  - g. Emulsification
  - h. Enzymatic browning
  - i. Carbonization
- 2. Key figures in the development of molecular gastronomy:
  - a. Josiah Willard Gibbs
  - b. Nicolas Vauquelin
  - c. Antoine Baume
  - d. Marie-Antoine Careme
  - e. Raymond Roussel
  - f. Evelyn G. Halliday & Isabel T. Noble
  - g. Belle Lowe
  - h. Elizabeth Cawdry Thomas
  - i. Nicholas Kurti
  - i. Herve This
- 3. Scientific tools, techniques and ingredients used in gastronomy.

# **Designer Dreams**

**<u>DESCRIPTION:</u>** Participants will be assessed on their understanding of the lives and designs of different luxury fashion designers.

**APPROXIMATE TIME:** 45 minutes

A TEAM OF UP TO: 1

**EVENT PARAMETERS:** One computer ONLY (to take the exam), one double sided 8.5 inches x 11 inches paper with information.

### **THE COMPETITION:**

- I. Coco Chanel: From childhood to death, the participant should know about the life of Coco Chanel.
  - Fashion Innovations: Understand the characteristics Coco Chanel aimed for in her designs (e.g. comfort, versatility, etc.)
  - b) Childhood: Know the major events of Coco Chanel's early life.
  - c) Adult life and romantic partnerships: Know the key components of her adult life and the following romantic partnerships of hers and how they shaped the *Chanel* brand: Étienne Balsan, Arthur "Boy" Capel, Hugh Grosvenor
- II. Christian Dior: Understand the details of his life such as his family, date/area of birth, etc.
  - a) Know the effects of the Stock Market Crash of 1929 on the *Dior* brand.
  - b) Fashion journey: Learn about the events that led him to get into fashion (being hired as Robert Piguet's assistant) and his life in the fashion industry up to his death.
  - c) "The New Look": Features of the designs that were a part of this era (style of skirts, etc.)
- III. Donatella Versace: Know how she ended up getting into the *Versace* brand (influence by mother, relationship with brother, etc.).
  - a) Personal Struggles: Scrutiny from the media and cocaine addiction.
  - b) Bold Designs: Be able to describe Donatella Versace's designs (bold, low-cuts, etc.)
  - c) Activism/Advocacy: Study her commitment to female and LGBTQ+ empowerment.
- IV. Giorgio Armani: Participants should understand his life, from his challenges in WWII to getting into the fashion industry.
  - a) Beginnings of the *Armani* brand: Co-founding *Armani* and the characteristics of his first collection.
  - b) "The Power Suit": How this changed the industry of women's professional clothing.
  - c) Legacy of Armani: Awards Giorgio Armani won, "The Giorgio Armani Foundation", etc.

## Media Mania

**<u>DESCRIPTION</u>**: Participants will be assessed on their understanding and familiarity of managing a social media campaign.

### A TEAM OF UP TO: 2

**APPROXIMATE TIME:** 50 minutes

#### **EXAM PARAMETERS:**

- a. Each participant may bring one (1) device to take the exam & design graphical details.
- b. Each participant may bring one (1) stand-alone, non-programmable, non-graphing calculator.

**THE COMPETITION:** This Exam will be administered as an online, simulation-type question test which includes multiple parts.

- 1. Planning:
  - a. Target audience.
  - b. Platform choice(s).
  - c. Promotion/content strategy.
  - d. Key messages to convey to the audience.
- 2. Content Creation:
  - a. Sample posts and advertisements including:
    - i. Text.
    - ii. Images.
    - iii. Hashtags.
    - iv. Calls to action with rhetorical devices.
- 3. Marketing Strategy:
  - a. Budget allocation for ads.
  - b. Influencer partnerships.
  - c. Engagement tactics.
- 4. Metrics and Adjustments::
  - a. Predicting/analyzing
    - i. Reach.
    - ii. Click-through rates.
  - b. Adjusting campaign strategy:
    - i. Based on statistics.
    - ii. Based on given unexpected scenarios.
- 5. Ethical considerations, Social impacts, and implications of this campaign.

# **Music Mentality**

**<u>DESCRIPTION:</u>** Participants will be assessed on their understanding and familiarity of the life and mentalities of Romantic-era composers.

A TEAM OF UP TO: 2

**APPROXIMATE TIME: 50 minutes** 

#### **EXAM PARAMETERS:**

- d. Each participant may bring one (1) device to take the exam on.
- e. Each participant may bring one (1) 8.5" x 11" sheet of paper that may contain information on both sides in any form and from any source. The sheet of paper may be laminated or placed in a sheet protector to increase durability. Multiple sheets of paper are prohibited.

**THE COMPETITION:** This Exam will be administered as an online, all multiple-choice test which includes multiple parts which can include but are not limited to timelines, matching, identification, models, illustrations, data analysis, and problems for students to solve. Content topics will include:

- 1. The identification of composers based on their major life events and any relevant information pertaining to them, which may include but are not limited to the birth and death of the composer, family background, instruments played, national origin, famous pieces and composing ethics.
  - a. Hector Berlioz
  - b. Max Bruch
  - c. Antonin Dvorak
  - d. Edward Elgar
  - e. Jean Sibelius
  - f. Bedrich Smetana
  - g. Pyotr Ilyich Tchaikovsky
- 2. The evolution of orchestral music from classical to protoromanticism, mid romanticism, and late romanticism.
- 3. The classification of different periods of music based on audio.
- 4. The identification and definitions of different music symbols which include but are not limited to dynamics, ornaments, music notation, tempo markings, and time signatures.
- 5. The identification of pieces by the composers above based on sheet music and audio files. Participants may also be given a cadenza and be asked to identify the respective piece or the composer. Participants should also consider the following pieces and all their movements (if

any or unless otherwise specified) before researching others. The pieces below are guaranteed to appear on the Exam.

- a. Symphonie Fantastique (Berlioz)
- b. Scottish Fantasy (Bruch)
- c. Violin Concerto, 1st movement (Bruch)
- d. Romance for Violin and Orchestra in F major, Op. 11 (Dvorak)
- e. Cello Concerto in E Minor, Op. 85 (Elgar)
- f. Violin Concerto in D minor, 1st movement (Sibelius)
- g. Z Domoviny (Smetana)
- h. Serenade melancolique, Op. 26 (Tchaikovsky)
- i. Souvenir de Florence, Op. 70, TH 118: III. Allegro moderato (Tchaikovsky)

# Sprint to Win

**<u>DESCRIPTION</u>**: Participants will be assessed on their understanding and familiarity of computing principles and program-writing skills.

## A TEAM OF UP TO: 1

**APPROXIMATE TIME:** 50 minutes

#### **EXAM PARAMETERS:**

- f. Each participant may bring one (1) device to take the exam on.
- g. Each participant may employ the use of scrap paper.
- h. Each participant may bring one (1) stand-alone, non-programmable, non-graphing calculator.

**THE COMPETITION:** This Exam will be administered as an online, two-part exam. The first part consists of 40 multiple-choice questions, to be completed in 30 minutes. After the allotted time of the first part, the second part will commence immediately, for which each participant will be provided with five (5) coding problems and must complete or partially complete as many test cases as possible to earn points within the allotted 20 minutes. There are 10 test cases per question, with a total of 50 points to be earned. Content topics will include:

- 1. 40 multiple-choice theory questions pertaining to the following topics:
  - a. Assembly Language Programming
  - b. Bit-String Flicking
  - c. Boolean Algebra
  - d. Computer Numbering
  - e. Data Structures
  - f. Digital Electronics
  - g. FSAs and RegEx
  - h. Graph Theory
  - i. LISP
  - j. Prefix/Infix/Postfix
  - k. Recursive Functions
  - 1. Pseudocode interpretation
- 2. 5 coding problems pertaining to the following topics (C++ preferred but Python/Java is ok):
  - a. String-processing
  - b. Data Structures
  - c. Branching (if-then-else)
  - d. Loops

## South Asian Cultures

**<u>DESCRIPTION</u>**: The theme of *South Asian Cultures* for this year's *Beyond Academia Olympiad Competition* is the culture of Pakistan.

**A TEAM OF UP TO:** 1

**APPROXIMATE TIME:** 45 minutes

**EVENT PARAMETERS:** Each participant is allotted one 8.5 inch by 11 inch sheet of paper with information on both sides and one computer ONLY to take the exam.

**THE COMPETITION:** The exam will be administered in the form of an online test containing 45 multiple choice questions. The exam content will include:

- I. The Religion of Islam:
  - a) The Five Pillars of Islam
  - b) The Six Articles of Faith
  - c) The Prophet of Muhammad

II. External Influences and Cultural Fusion of Pakistani Culture: Aspects of Pakistan's culture that were developed/influence by other peoples, civilizations, etc.

- a) Influences of Indus Valley civilizations
- b) Mughal and British influences

c)

## Wars of the World

**<u>DESCRIPTION:</u>** Participants will be assessed on their understanding and familiarity of World War II. **A TEAM OF UP TO:** 2 **APPROXIMATE TIME:** 40 minutes

#### **EXAM PARAMETERS:**

- a. Each participant may bring one (1) device to take the exam on.
- b. Each participant may bring one (1) 8.5" x 11" sheet of paper that may contain information on both sides in any form and from any source. The sheet of paper may be laminated or placed in a sheet protector to increase durability. Multiple sheets of paper are prohibited..

**THE COMPETITION:** This Exam will be administered as an online test. Content topics will include but are not limited to:

- 1. The causes of WWII and how certain alliances were forged. Be sure to study:
  - a. German incentives for WWII.
  - b. Italian & Japanese incentives to be on Germany's side.
  - c. The leadup to WWII in all countries where appropriate.
- 2. The state of France. Some key points to consider:
  - a. Phillipe Petain & Vichy France
  - b. Charles de Gaulle & Free France
  - c. Topography/geography
  - d. Important figures that were crucial to smuggling people out of France. Ex:
    - i. Andrée de Jongh & the Comet Line
    - ii. Varian Fry
  - e. The French government before and after the war.
- 3. U.S. involvement in the war, including but not limited to:
  - a. Policies leading up to the war
  - b. Reasons for intervention
  - c. The American homefront (during WWII)
- 4. Major battles, including but not limited to:
  - a. Battle of Britain
  - b. Evacuation of Dunkirk
  - c. Operation Barbarossa
  - d. Siege of Leningrad

- e. Battle of Moscow
- f. Battle of Midway
- g. Battle of Stalingrad
- h. Battle of the Atlantic
- i. Battle of El Alamein
- j. Operation Torch
- k. Battle of Tunisia
- 1. Battle at Normandy
- m. Battle of the Bulge
- 5. Events in the Pacific
  - a. Guadalcanal
  - b. New Guinea
  - c. Battle of Tarawa
  - d. Battle of Kwajalein
  - e. Battle of Saipan
  - f. Battle of Guam
  - g. Battle of Tinian
  - h. Battle of Peleliu
  - i. Battle of Iwo Jima
  - j. Battle of Okinawa
  - k. Bataan Death March
- 6. Development of New Tech
  - a. Radar/Sonar
  - b. Atomic Bomb
  - c. Turing's work in cryptography
  - d. Navajo Code-Talkers
- 7. Aftermaths & Effects of the War
  - a. Lead-up to Cold War
  - b. Shift in international power dynamics
  - c. United Nations
  - d. Nuremberg Trials