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Harvard Undergraduate Economics Association

Coaches Manual

# Harvard Pre-Collegiate Economics Challenge Handbook

April 2nd, 2022

## Overview

The Programming Committee of the Harvard Undergraduate Economics Association (HUEA) is responsible for organizing the Harvard Pre-Collegiate Economics Challenge (HPEC), which has historically occurred in the first half of April. This year, the competition will take place on Saturday, April 2<sup>nd</sup>, 2022. The competition consists of a written exam round (with multiple choice individual exam), followed by quiz bowl rounds in round-robin and single elimination format. Given ongoing public health restrictions across the country, HPEC will this year for the first time offer a **virtual option** over Zoom **alongside our traditional in-person program**. To ensure fairness to all contestants, in-person contestants and virtual contestants will be part of different divisions of HPEC and will be competing against opposing teams who are also in person or also virtual, respectively. While different teams from the same school may participate in different divisions, each individual team may participate either virtually or in person, not both.

HPEC has been growing in prestige and popularity, and HPEC 2014 marked the first time that schools outside of North America competed in the tournament. Although there have been variations over time, HPEC now has a \$125 base fee for each participating quiz bowl team. We continue to allow the first teams that register to decide whether they want a second or third quiz bowl team.

## Travel

Due to ongoing public health restrictions imposed by Harvard, HPEC will not be able to offer lodging in Harvard housing over the weekend. We are currently looking into getting a block rate at a nearby hotel, but, for now, teams should seek out lodging near campus on their own.

## Exam Content and Rules

The competition consists of two components: a written exam followed by quiz bowl rounds.

Most of the materials tested in the competition will not exceed the AP Microeconomics/Macroeconomics level. No calculus will be used. Exam content may, however, draw on international economic concepts, historically significant economic ideas and ideas, and current economic events. Additionally, even though the AP curriculum does not use any equations to describe supply and demand, questions involving equations to describe supply and demand may appear on the written test.

## Written Exam: In-Person

The written exam will be administered in the morning before the quiz bowl begins. The test consists of 60 multiple choice (A-D) questions to be completed in 90 minutes. No communication between team members or between students and coaches is allowed during the test. No calculators are allowed. No notes or external aids of any kind are allowed. An individual's exam score will be a sum of (the number of correct answers they provide) plus (the number of blank answers, divided by four). No credit will be awarded for an incorrect answer.

If a student finishes early, they may turn in their exam but may not leave the competition room. If a student needs to go to the restroom, they must hand in their exam before leaving for the restroom.

When a student turns in their exam, they must turn in their whole exam including the exam questions, not just their answer sheet.

### **Written Exam: Virtual**

Teams competing virtually will take a written test of the same format: 60 questions to be completed in a 90-minute time interval. However, due to different hours of availability across our many participating schools, which span multiple time zones, the virtual written test may be taken **at any point within a 48-hour window**, starting at **12:00 A.M Eastern Standard Time on March 31, 2022** and closing at **11:59 P.M. Eastern Standard Time on April 1, 2022**. The test must still be completed within 90 minutes; once the contestants open their browser window to begin the test, a 90-minute timer will start, and contestants must submit their test before the timer expires to have their answers scored.

Teams taking the written test virtually will be bound by an honor statement that they will affirm before they begin. The team's coach or another registered adult must proctor the students taking the written test. As is the case for the in-person test, no communication between team members or between students and coaches is allowed during the test, with the exception of the team's proctor reading out the rules before the test and granting permission to use the restroom during the test. Calculators and other electronic devices are not allowed. No notes or external aids of any kind are allowed. The virtual test will utilize online proctoring software to ensure honest test-taking.

### **Quiz Bowl Rounds**

The quiz bowl rounds will consist of rounds of a fixed number of questions each and will last no longer than 15 minutes per round. The round-robin quiz bowl rounds are 15 questions each whereas the elimination rounds are 18 questions each. Again, no calculators are allowed, but scrap paper will be provided for in-person contestants. Virtual contestants may also use their own scrap paper.

A team may buzz in at any time, at which point the moderator will stop reading the question and wait for an answer. A team will have ten (10) seconds to provide an answer, with a two (2) second warning, and when either the ten (10) seconds have passed or the initial team to buzz in provides the wrong answer, the question will be re-read in full to the opposing team, who will then have ten (10) seconds to provide an answer with a two (2) second warning. If after ten (10) seconds the second team cannot provide an answer, then the question is passed and the correct answer shall be read out loud by the moderator.

If the question is read in its entirety and no team has buzzes in after five (5) seconds, the question will be passed and the correct answer shall be read out loud by the moderator. No explicit deferral of a question is allowed.

Ties are allowed for round robin quiz bowl rounds but not for elimination rounds. In the case of a tie at the end of an elimination round, a tiebreaker will be asked. Whichever team buzzes in and gives the correct answer first wins the round.

### **Quiz Bowl for Virtual Contestants**

HPEC is pleased to be offering a quiz bowl for virtual contestants, which will take place over Zoom. The virtual quiz bowl will be held either in the days before April 2 or the days after (exact time TBD) and will be held separately from the in-person quiz bowl and will match virtual teams against other virtual teams.

The structure of the virtual quiz bowl will be almost identical to that of the in-person quiz bowl, with a few exceptions. First, teams will “buzz in” using the **Zoom chat feature**. Whichever team member wishes to answer the question will type in the chat, and the moderator will allow whoever types first the first opportunity to answer the question. The question-answer process previously outlined will be used for the virtual competition.

To ensure equitable competition, it is imperative that teams participate in the virtual quiz bowl with a **strong internet connection**. We would recommend a **wired Ethernet connection** for all contestants to minimize potential connectivity issues and time lags that might afford one team an unfair advantage. If a wired connection is not possible, please ensure that your team is participating in a classroom or home where the wireless connection is strong and uninterrupted. Teams will not be penalized for disconnections, and we will afford the opportunity to correct any internet problems that may arise, but the competition will run far more smoothly if all teams come prepared with a strong connection. Lag will not be accepted as a reason to challenge the result of a quiz bowl round.

## Recap of Official Rules

### *Competition Structure*

1. Teams are divided into two “groups” and will alternate between taking the written exam and competing in Quiz Bowl Rounds.
2. Teams from the same school will be assigned to the same group to ensure question security.
3. Teams will be randomly assigned to a round-robin "division" for Quiz Bowl rounds; teams from the same school will not be sorted into the same division.
4. Each team should ideally face every other team in its Quiz Bowl division once during preliminary rounds (this is not guaranteed due to logistical constraints).
5. If there are an odd number of teams, the odd-team-out each round will be awarded a bye and 0.5 wins.
6. Advancement to single-elimination rounds will be determined by teams' weighted performances on both the written exam and preliminary Quiz Bowl rounds. The top 16 highest-scoring teams will advance. Ties will be broken in the following order:
  - o Quiz Bowl win/loss record
  - o Quiz Bowl point differential
  - o Total number of Quiz Bowl points scored

### *Curriculum Breakdown*

Written exam (approximate percentages):

- 40% Microeconomics
- 40% Macroeconomics
- 20% Current Events

Quiz Bowl (approximate percentages):

- 25% Microeconomics
- 25% Macroeconomics

- 20% Economic History
- 15% Current Events
- 10% Potpourri
- 5% Modern Research Topics

#### *Written Exam*

1. The written exam will consist of 60 multiple-choice questions to be completed in 90 minutes.
2. Each correct answer is worth 1 point; each blank answer is worth 0.25 points; each incorrect answer is worth 0 points.
3. No calculators are allowed, but scrap paper will be provided.

#### *Quiz Bowl*

1. Each Quiz Bowl round will consist of 15 questions. Rounds will end after 15 minutes or after all 15 questions have been asked, whichever is earlier.
2. Teams may buzz in at any time, at which point the moderator will stop reading the question and wait for an answer.
3. After a team has buzzed in, that team will have 10 seconds to discuss and provide an answer.
4. Only the first answer is considered official. All subsequent answers shall be ignored.
5. If the first team to buzz in answers incorrectly, the question will be read in its entirety to the other team.
6. If the moderator has finished reading the question and no team has buzzed within 5 seconds, he or she will move on to the next question.
7. One point is awarded for each correct answer. No points are deducted for incorrect answers.
8. The team with the most points at the conclusion of the round wins. Ties are allowed for round robin quiz bowl rounds but not for elimination rounds.
9. If there is a tie at the end of an elimination round, sudden-death tiebreaker questions will be asked until one team has won.

#### *Challenge Policy*

1. Challenges can only be made by actively competing students, not coaches or audience members.
2. All protests on written exam questions must be made within 15 minutes of the conclusion of the exam directly to the competition organizers.
3. Quiz Bowl moderator judgment calls are not ordinarily not reviewable. In case of blatant rules violations that may tip the outcome of a Quiz Bowl round (scoring inaccuracies, etc.), teams may appeal to the competition organizers immediately after the round has concluded.
4. For challenges to answers in Quiz Bowl rounds, a team member will raise a hand and verbally request a challenge from the moderator BEFORE the moderator has begun reading the next toss-up or bonus. If the moderator is unable to resolve the challenge, (s)he will consult the competition organizers.
5. The decision of the competition organizers is FINAL.

#### *Awards/Recognition*

- Top three overall highest-scoring students on the written exam in each division
- Quiz Bowl overall team champion and runner-up in each division

# Competition Day

## Logistics

There will be scrap paper available in large quantities for in-person teams for both the written exam and for each quiz bowl.

## Morning Registration

At the registration table, in addition to accepting payments, each school's student roster will be confirmed. We will announce an online registration system for virtual teams closer to the competition date.

## Schedules

We will print an ample number of schedules to distribute on the day of the competition. We will also provide this electronically prior to the competition.

## Round Robin Format

Round robin groups will consist of four teams each, with seed balancing based on the NCAA basketball seeding format.

For 32-team formats, round robin seeding and groups will be determined according to written exam score rank (in parentheses) as follows:

A	B	C	D	E	F	G	H
A1 (1st)	B1 (2nd)	C1 (3rd)	D1 (4th)	E1 (5th)	F1 (6th)	G1 (7th)	H1 (8th)
A2 (16)	B2 (15)	C2 (14)	D2 (13)	E2 (12)	F2 (11)	G2 (10)	H2 (9)
A3 (17)	B3 (18)	C3 (19)	D3 (20)	E3 (21)	F3 (22)	G3 (23)	H3 (24)
A4 (32)	B4 (31)	C4 (30)	D4 (29)	E4 (28)	F4 (27)	G4 (26)	H4 (25)

## **Elimination Format**

Following the round robin rounds, the seeds of each individual group (where A(2) denotes the second-ranked team in Group A after the round-robin rounds) will be determined and elimination brackets will be created as follows:

Pool 1.1.1: A(1)-B(2) — Pool 1.1.2: G(1)-H(2)

Pool 1.2.1: E(1)-F(2) — Pool 1.2.2: C(1)-D(2)

Pool 2.1.1: B(1)-A(2) — Pool 2.1.2: H(1)-G(2)

Pool 2.2.1: F(1)-E(2) — Pool 2.2.2: D(1)-C(2)

In this scheme, the first elimination round faceoffs will be pit the two teams in the same x.y.z pool against each other. The second elimination rounds will pit the remaining two teams in the same x.y pool against each other. After two elimination rounds, the winner of Pool x.1 plays the winner of Pool x.2 in the semifinals, and the winner of Pool 1 subsequently plays the winner of Pool 2 in the finals.

## **After Final Quiz Bowl Round**

After the final quiz bowl round, there will be both in-person and virtual award ceremonies. Trophies will be presented to the winning in-person team, and individual top scores will be announced. The top two individuals will receive trophies. Teams participating virtually will have any trophies they earn mailed to them directly after the competition.

## After the Competition

### Deliverables

After the competition is over, we will send out the following three forms/pieces of information to all coaches:

- Individual students' scores
- Feedback form
- Correspondence information form so that we can e-mail you in the future

Thank you so much to the coaches for participating and for your support of economics.

### Website Updates

The website will be updated with the results from the year's competition and a picture of the winners.

The HPEC page will be changed to indicate next year's competition date as soon as possible.