

Event Handbook

Quick Reference	2
Introduction	3
Before the Competition	4
Tournament Overview	5
Schedule	7
Competition Rules	10
Awards	17
After the Competition	18

Quick Reference

Event Schedule:

See below, will also be posted on NET Website

Power Round Submission: The Power Round should be emailed to NET by the deadline of Thursday, March 31 11:59 pm CDT

Final Results: To be released Sunday, April 2 during the Virtual Closing Ceremony

Contact:

For questions before the event, questions during the Power Round, or all other general questions, please email nuecontournament@gmail.com. We will be most responsive between the hours of 9 am - 7 pm CDT.

For urgent issues only, please call 678-761-1112 (US & Canada only, please). NET is a small team of student volunteers, so please be understanding!

For any other economics-related inquiries, direct correspondence to:

Jerome H. Powell
Chairperson
Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue N.W.
Washington, DC 20551

Introduction

Dear Coaches, Advisors, and Participants,

Welcome to the 2022 Northwestern Economics Tournament! We appreciate your interest in our event. We are so excited to be able to host you on our beautiful campus this year and we hope to provide students with an enriching and educational experience.

Our Mission Statement: The purpose of NET is to give high school students opportunities to explore the field of economics before entering college. This organization aims to introduce high school students to economics in a welcoming environment through competitions and interactive speaker events. NET also encourages the participation of Northwestern students, who plan and organize the event.

This year is our first in-person tournament in two years, and we are excited to be welcoming 5 teams back to Northwestern's campus. NET22 is also our first hybrid tournament, and will be hosting our virtual Econ Bowl the day after the in-person tournament for 14 teams. In addition, we will be live-streaming our educational events so that any students at any registered school may participate. Altogether, this will be NET's largest tournament, with 19 teams participating in total.

We have also continued our status as an international tournament, this year welcoming teams from India, China, and Thailand participating in our asynchronous Power Round and virtual Econ Bowl.

We'd like to thank the passionate students who make NET so engaging every year, and the coaches and advisors who make this event possible. We look forward to seeing you in April, and may the best economist win!

Go 'Cats!

The NET Team

Before the Competition

Prior to the competition, teams should receive registration confirmation from NET about the final division they have been assigned to for the Power Round (Introductory or Advanced). They should confirm that contact information forms, media release forms, COVID-19 vaccination forms, and any other information requested has been filled out and submitted to NET.

Each team can expect two different competitive events: a written Power Round exam and the Econ Bowl. The asynchronous Power Round exam should be finished by the team with no outside help and submitted by the deadline set by NET, who will take time zone accommodations into account. The Econ Bowl will occur in-person for those on Northwestern's campus, and virtually for students registered for our virtual event. All rules relating to the tournament structure, Power Round, Econ Bowl Round, curriculum breakdown, scoring, tiebreakers, and challenges are posted below. Rules may have changed slightly from previous years so please review them in detail even if you are a returning school.

In the weeks leading up to the tournament, teams can prepare by checking out sample Power Round exams and Econ Bowl questions on our website. Solutions for the corresponding practice exams are also provided on the website. This should give teams a good idea of the level of difficulty and prior knowledge expected. Those assigned to the Introductory Division for the Power Round are not expected to have taken economics and calculus classes and exam questions will reflect a lighter difficulty level. Those assigned to the Advanced Division can expect to see concepts learned from their school curriculums relating to a full range of microeconomic, macroeconomic, and calculus principles. Teams in both divisions will receive the same Econ Bowl questions.

Dress attire for the tournament is casual (no need to dress up!). Please familiarize yourself with the schedule provided below.

Webinar Zoom links for the Hybrid Educational Events (the Opening & Closing Ceremonies, the Guest Speakers, and Undergrad Panel) will be posted in this document. Educational events are open to all students and advisors, and the Zoom link can be shared with them to attend from their remote location. **Only send Zoom links to students at your school.** If you face any technical issues connecting to the tournament and need to get in contact with us, please email nuecontournament@gmail.com for non-emergency issues and call or text at +1 (678) 761-1112 for emergency issues.

Tournament Overview

In-Person!

NET 2022 will be held in-person! Please see below for more details on etiquette, schedule, and rules.

All times will be posted in the Evanston, IL local time, which is Central Daylight Time (CDT, or UTC-5).

Location and Transportation

- All NET events will take place at the Kellogg Global Hub (KGH) at Northwestern University's Evanston campus.
 - o KGH Address: 2211 Campus Dr, Evanston, IL 60208.
 - Teams are responsible for arriving at KGH on their own.
- Parking is available at multiple locations on Northwestern's campus. More information here.

COVID Precautions

- All NET attendees are required to follow <u>Northwestern's COVID safety policy</u>.
- All NET attendees must wear masks at all times, covering both their nose and mouth.
- All NET attendees will show proof of vaccination prior to the tournament, or proof of a negative COVID test within 24 hours of the start of the event.
- Failure to comply with Northwestern's COVID policy could result in disqualification from the tournament.

Tournament Etiquette

- All NET participants are expected to be courteous and respectful to all NET organizers, participants, coaches, etc.
- Participants are not required to dress formally and can wear any school-appropriate outfit.
- Do not make any recordings of any part of NET.
- Do not publicize any NET Zoom links (for educational events), this includes, but is not limited to, forwarding links to students who do not attend your school or posting links on social media.
- The educational events, which include the Opening and Closing Ceremonies, will be in a hybrid format. They will be live-streamed for any students not able to attend the in-person event

•		
	future NET competitions.	

Schedule

In-Person Schedule

POWER ROUND: Tuesday 3/29 to Thursday 3/31

Teams will complete the Power Round asynchronously. The time limit is 2.5 hours. The Power Round will be emailed to teams (advisors and all registered team members) on **Tuesday**, **March 29 8:00 am CDT** and should be submitted by **Thursday**, **March 31 11:59 pm CDT** by emailing your answers as a pdf to nuecontournament@gmail.com

NET HYBRID EVENT: Saturday 4/2

9:00-9:30am - Check-In

- Location: Entrance of Kellogg Global Hub
- Description: Teams meet at Kellogg to check in with the NET team and learn about their specific schedule for the day. Delicious donuts from a local bakery provided!

9:30-10:00am - Welcome Ceremony

- Location: Kellogg 1410
- Description: All teams gather at the Kellogg conference room for an introduction and brief overview of the tournament, hosted by NU Professor Mark Witte.

10:00-12:30am - Round Robin Econ Bowl

- Location: Provided on the day of the tournament
- Description: Teams will compete head-to-head following a 5-team Round Robin format.
 Teams will be provided information on their schedule for the Econ Bowl on the day of the tournament, including where they will be competing and who they will be competing against.

12:30-1:30pm - Lunch

- Location: Kellogg 1410
- Description: Lunch is provided to all teams by the NET Team. This time can also be used to explore the beautiful Northwestern campus!

1:30-2:00pm - Professor Talk

- Location: Kellogg 1410
- Featuring NU Professor James Hornsten
 - o Topic: Monopolization Monomania

James Hornsten serves on the American Economic Association's Committee on Economic Education and the board of the National Economics Teaching Association, and has co-organized a handful of national conferences on teaching economics, including the last three AEA Conferences on Teaching and Research in Economic Education (CTREE). He was a recipient of the 2017 Weinberg College of Arts and Sciences Alumni Teaching Award and the 1998 WCAS Outstanding Teaching Assistant Award as a graduate student lecturer. He has taught over one hundred courses at Northwestern, primarily on the topics of microeconomics, industrial economics, monopoly (antitrust & regulation), and business strategy. He has taught several times for the summer bridge program, frequently advises Posner Fellows, and serves as the department's first-year advisor.

2:00-2:30pm - Final Econ Bowl Rounds

- Location: Kellogg 1410
- Description: The top two scoring teams from the first round will compete in an exciting head-to-head competition in front of the remaining teams.

2:30-3:30pm - Econ Activities

- Location: Kellogg 1420
- Description: As a fun way to end the competition portion of NET, students will get to participate in a variety of economics related activities. Students will learn about game theory by playing the "Prisoner's Dilemma" and about market efficiency through "the Ultimatum Game."

3:30-4:00pm - Professor Talk

- Location: Kellogg 1410
- Featuring <u>NU Professor</u> Seema Jayachandran
 - o Topic: Finding Smart Policies to Curb Climate Change
 - Seema Jayachandran is a Professor of Economics at Northwestern University. Her research focuses on environmental conservation, gender equality, health, and other microeconomic topics in developing countries. She serves on the board of directors of the Abdul Latif Jameel Poverty Action Lab (J-PAL) and leads J-PAL's gender sector. She is also co-director of the National Bureau of Economic Research's program in Development Economics and co-editor of the American Economic Journal: Applied Economics. In addition, she serves on CARE's board of directors. Prior to joining Northwestern, she was a faculty member at Stanford University. She earned a PhD in economics from Harvard University, a master's degree in physics and philosophy from the University of

Oxford where she was a Marshall Scholar, and a bachelor's degree in electrical engineering from MIT.

4:00-4:30pm - Northwestern Undergraduate Q&A Panel

- Location: Kellogg 1410
- Description: Students will have the opportunity to ask questions to the NET team, composed of a diverse group of undergraduate students at Northwestern University.
 These questions can be about college applications, classes, economics, extracurricular activities, or anything else!

4:30-5:00pm - In Person Award Ceremony

- Location: Kellogg 1410
- Description: All teams will come together for the award ceremony and the conclusion of NET 2022. Plaques for the Champion and 2nd Place teams will be presented.

5:00-5:30pm - Check Out

- Location: Kellogg 1410
- Description: Teams meet with the NET team to confirm that they received their awards and depart campus. We hope to see you again next year!

NET VIRTUAL EVENT: Sunday 4/3

4:30-5:00pm - VIRTUAL Closing Ceremony

- Location: https://northwestern.zoom.us/j/92004307321
- Description: All NET22 Teams will join virtually to receive awards for the overall winners
 of the Power Round and Virtual Econ Bowl.

Competition Rules

RULES FOR ALL TEAMS

TOURNAMENT ELIGIBILITY

- Student competitors must be enrolled in a high school in one of grades 9-12 for the current academic school year – or if home-schooled, be of high school standing.
- Each team must consist of 4 students, and each school may send only one team. In addition to the 4 students, teams may optionally send one alternate.
- All team members must attend the same high school.
- Each team must be accompanied by an advisor who is a faculty member at the team's high school OR a parent/guardian of one of the team members.
- Sixteen (16) teams will be allowed to register for the tournament. There will be a waitlist for additional teams that can enter the tournament if any already-entered teams cancel their registration.
- Each team should designate a team captain, who will be responsible for answering bonus questions and signing the score sheet after each match.

TOURNAMENT STRUCTURE

There are two main competitive events: the Power Round and Econ Bowl

- Both virtual and in-person teams will take the Power Round asynchronously before the NET22 weekend.
- The format and rules of the Econ Bowl differ depending on the selected modality (virtual or in-person).

CURRICULUM BREAKDOWN (ALL TEAMS)

- The power round will consist of two exams for each division: one which focuses on Macroeconomics and one which focuses on Microeconomics. Each exam will consist of 3 to 4 free response questions of different weights.
- Sample Power Round and Econ Bowl questions are available on the NET website.
- Note: The percentages below are approximate.

Team Power Round

 50% Macroeconomics (for example, but not limited to: Trade, Growth, Fiscal/Monetary Policy, History) • 50% Microeconomics (for example, but not limited to: Industrial Organization, Public Finance, Microeconomic Theory, Econometrics)

Team Econ Bowl

- 20% Macroeconomics (for example, but not limited to: Growth, Trade, Fiscal/Monetary Policy, Trade)
- 20% Microeconomics (for example, but not limited to: Industrial Organization, Public Finance, Theory, Labor)
- 15% Current Events
- 15% Economic History
- 15% History of Economic Thought
- 5% Finance
- 5% Econometrics
- 5% Wildcard

POWER ROUND RULES (ALL TEAMS)

- The Power Round is a written, team-based exam. All four members of a team collaborate to complete around 3 free response questions in 75 minutes.
- The Power Round consists of two exams: one Microeconomics exam, and one Macroeconomics exam.
- Each question is worth a specific number of points, and point values will be denoted on the exam. Incorrect or unanswered questions receive zero points, and there is no penalty for guessing. Partial credit may be awarded.
- Calculators and notes are allowed in the advanced division (but not in the introductory division), but use of the internet is strictly prohibited in both.
- Only the four team members and one alternate (if applicable) are allowed to contribute to the completion of the Power Round. Teams may NOT seek outside help from advisors, parents, other teachers, other students, former Economics Nobel Laureates, etc. If teams have questions, find any errors in the exam, or require clarification, they should contact NET. Teams found in violation of these rules will be disqualified from the competition and their school may be barred from participating in future NET events.
- One of the questions will be a tiebreaker question, but teams will NOT know in advance which question is the tie-breaker question. This question will only be graded if the two highest-scoring teams earn equal numbers of points on the free response questions. The team that earns more points on this tie-breaker question will be declared the winner.
- If there is still a tie after the tiebreaker question is factored into both teams' scores, a final tiebreaker question will be sent to both teams to complete. If both teams achieve equal scores on this exam as well, a tie will be declared and both teams congratulated for their dexterous economic knowledge.

RULES FOR IN-PERSON TEAMS

The format of the in-person competition is subject to change at any time subject to local and Northwestern policies.

TOURNAMENT STRUCTURE: IN-PERSON

- The Power Round is a team-based free-response written exam, and students will complete the Power Round before they arrive on Northwestern campus for the in-person events.
- The Econ Bowl is an in-person head to head competition that consists of two stages: a round robin and a final round.

ECON BOWL RULES (IN-PERSON)

The in-person Econ Bowl rules are largely retained from the NET 2019 competition. Some rules have changed, so please read through the rules carefully.

Format

- The Econ Bowl consists of two stages:
 - Round Robin: Through a total of 5 rounds, all 5 in-person teams will play every other team. During each round, 1 team will have a "Bye", and sit out for that round, while the other 4 teams are competing.
 - Final Round: The top 2 teams from the Round Robin will advance to the final round and compete head-to-head. The winner of the final round will be declared the winner of the Econ Bowl.
- Each round consists of two teams competing head-to-head in a verbal competition featuring a lockout buzzer system.
- Teams earn points by buzzing in and answering questions. The team with the most points at the end of the match is the winner of that match.
- Teams consist of four players and an alternate. One player for each team should be designated as the captain: the captain is responsible for answering the bonus questions on behalf of their team. For any given match, notwithstanding any extenuating circumstances, the same set of four players must play throughout the match.

Question Styles

- Questions are in pairs of toss-ups and bonuses. The team that successfully answers the toss-up will have an opportunity to answer the bonus question.
- No communication between players is permitted during toss-up questions.
 Players are permitted to collaborate to answer bonus questions.

- Toss-ups will appear in short answer form. There will be no computational questions in toss-ups.
- Bonuses will occur in Multiple Choice and Short Answer format. The format of the bonus will be specified by the moderator before the question is read. Basic mathematical computations may appear in bonuses, but not toss-ups.
- Matches will consist of 15 pairs of toss-ups and bonuses (30 questions total)

Time

- Round robin and single elimination matches will last 25 minutes or until all 15 questions have been read, whichever occurs first.
- If the round time ends while a question is in progress, the round will end after the bonus is completed.

Answering Toss-Ups

- Toss-ups are answered individually. Players may NOT collaborate to answer a toss-up.
- Each player can buzz in. The moderator will read questions that all eight players have an opportunity to answer.
- To answer a question, a player must buzz in using the lockout buzzer system. After a question is read, players have five seconds to buzz in.
- The player that buzzes in will be recognized by the moderator explicitly, first by naming the school and then identifying the student. Only the player that is recognized is allowed to give an answer.
- Players should wait until they are recognized by the moderator before giving their answer.
- Once recognized, players have approximately 3 seconds to begin providing an answer. If an answer is not provided within that time or there is a significant delay while providing an answer, the moderator will call a "stall" and the question will be counted as incorrect. Prefacing remarks that do not answer a question, such as "my answer is..." will be counted as beginning an answer. Judgment calls by the moderators are final.
- If a question is answered correctly, the team that answered the question correctly is awarded 5 points and the bonus will be read to them.
- If a question is answered incorrectly, the team that did not provide an answer will have an opportunity to buzz in.
 - Once the moderator indicates that the question is incorrect, the second team will have five seconds to buzz in and provide an answer.
 - If the second team buzzes in, is recognized, and answers the question correctly, this team is awarded 5 points and the bonus will be read to them.
- If both teams are unsuccessful with a toss-up, the bonus is not read. The
 moderator will identify the correct answer to the toss-up and proceed to the next
 toss-up.

• In most cases, questions will not be re-read.

Answering Bonuses

- The team that successfully answers the toss-up question will have an opportunity to answer the bonus.
- After the bonus question is read, the team captain has approximately 20 seconds to provide an answer. After this time, the moderator will prompt the team captain for an answer. If no answer is given promptly, the bonus will be forfeited.
- Team members may collaborate during a bonus. The opposing team (that does not have the bonus) should remain silent during this time.
- Only the answer from the team captain will be accepted for the bonus. Attempts
 to answer the bonus from members who are not the captain will not be
 accepted.
- A correct bonus will be worth 3 points.

Acceptable Answer Formats

- For short answer questions, equivalent answers will be accepted.
- Multiple choice questions may be answered in one of three ways:
 - Letter only (e.g. W, X, Y, or Z)
 - Verbal answer only (e.g. "upwards")
 - Letter AND verbal answer (e.g. "W, upwards")
 - If the verbal answer is provided, it must match the question exactly as it is read by the moderator or as is written (e.g. "leftwards" or "up" will be incorrect if the question indicates "upwards").
- For examples of equivalent answers and correct responses, see the sample video which will be released prior to the start of the competition and made available to all competitors to view.

Interrupting

- A player may buzz in before a question is read in its entirety; this is called an "interrupt."
- The moderator will recognize the player who interrupted. Interruptions must be done via buzzer, which will automatically notify the moderator who buzzed in first in the event of a perceptual tie.
- If a player interrupts and answers the question correctly, the player's team is awarded 5 points.
- If a player interrupts and answers incorrectly, the question will continue being read, and the opposing team will have an opportunity to answer in a manner consistent with the rules above.
- The team that answered incorrectly may not buzz in again for this question.

Scoring

Questions

- Correct toss-ups are worth 5 points.
- Correct bonuses are worth 3 points.
- Incorrect answers receive 0 points.

Penalties

- If team members are found collaborating during a toss-up, the opposing team is awarded 3 points, and the collaborating team forfeits their ability to answer that toss-up question.
- If a player provides an answer before they are recognized by the moderator (i.e., "blurts") the opposing team is awarded 3 points. If applicable, the question will be re-read for the opposing team, who will have an opportunity to buzz in. The team which blurted will not have an opportunity to buzz in.
- If a team is participating in distracting behavior during another team's bonus, they will receive a warning from the moderator. Any other instances of distracting behavior after the first warning will result in 5 points being awarded to the opposing team.
- The team with the most points at the end of the match will be declared the winner of that match. No ties can occur during the single-elimination bracket.
- In the round robin portion, teams receive 2 bracket points for a win, 1 bracket point for a tie, and no bracket points for a loss.
- The top two teams in each division with the most bracket points will advance to the single-elimination.

Tiebreakers

- In the event that two teams in the same division are tied in round-robin points and this tie matters for purposes of determining the single-elimination bracket, the team which won the pair's head-to-head match will advance to the single-elimination tournament.
 - Further, in the event that the head-to-head match resulted in a tie, the team with the highest number of points earned in all rounds will advance to the single-elimination tournament.
 - Further, if two teams are tied in match points, the two teams will proceed to compete in a 5 toss-up-only runoff tiebreaker with the same rules regarding toss-ups as above.
- No ties are allowed in the single-elimination tournament. If a tie occurs once a single-elimination round has been completed, the two teams will proceed to compete in a 5 toss-up runoff tiebreaker with the same rules regarding toss-ups as above.

Challenges

- There are two types of challenges: rules and content challenges. Only the eight players in a match may issue challenges. Advisors and alternates may NOT issue challenges.
- Rules challenges relate to scoring or the application of the rules (e.g. scoring).
 Judgment calls by moderators (e.g. whether an interrupt had occurred) CANNOT be challenged.
- Content challenges relate to the validity of round questions or acceptable answers.
- Teams should state their challenge to a specific question <u>before the next</u> <u>question is read</u> by saying "challenge." Once a team member challenges a question, the round time is stopped. Once a new question is read, teams may no longer challenge previous questions.
- Teams are allowed at most two unsuccessful content challenges per round.

Supplementary Rules

- The structure of the Econ Bowl is subject to change at the discretion of NET organizers, if deemed necessary for the successful and fair execution of the tournament.
- No cell phones or electronic devices may be used by players, advisors, substitutes, or spectators once the match has started. If any electronic device is audible during the match, the person possessing the device must leave the room for the rest of the match, and the device may be subject to confiscation for the remainder of the tournament.
- If the buzzer system significantly malfunctions during the course of a toss-up
 question and officials are unable to determine which of the two players buzzed
 in first, the round time will be paused, the question will be discarded, and the
 buzzer system will be replaced. When play is ready to resume, the next toss-up
 will be offered to both teams, or if this situation occurs on the last question of
 the round, the officials will obtain a replacement question.
- If the moderator inadvertently responds to someone other than the captain while
 indicating whether an answer is correct, or to the captain before the answer is
 being given, the officials will replace the game time used in that bonus, and the
 next bonus question will be read to the team playing the bonus. If this situation
 occurs on the last question of the round, the officials will obtain a replacement
 bonus question

Awards

- Power Round: top overall highest-scoring team in *each* division (Introductory and Advanced):
 - Certificate of recognition signed by the Northwestern Economics Department Chair
 - \$100 prize (given as 4, \$25 Amazon gift cards)
- In-Person Econ Bowl: Overall Champion Team:
 - o Official NET Champion Plaque
 - \$100 prize (given as 4, \$25 Amazon gift cards)
- In-Person Econ Bowl: Overall 2nd Place Team:
 - o Official NET 2nd Place Plaque

After the Competition

The winners of the Power Round will be announced at the Virtual Closing Ceremony. Awards will be sent to the advisors of winning teams via email after the competition.

Surveys will also be sent to all students and advisors asking for feedback. Please fill these out to help us improve NET for future years!

Following the tournament, Power Round and Econ Bowl rankings will be posted on the NET website.