



NORTHWESTERN ECONOMICS TOURNAMENT

Event Handbook

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Quick Reference

Event Schedule:

See below!

Power Round Submission: *The Power Round should be emailed to NET by each team's deadline.*

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 845-518-1188 (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 2023 Northwestern Economics Tournament! We greatly appreciate your interest in our event. We are so excited 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 we are excited to be welcoming a record number of 11 teams back to Northwestern's campus. NET23 is also a hybrid tournament, and we 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 25 teams participating in total.

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

We would 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

Before 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, and any other information requested has been filled out and submitted to NET.

Each team (virtual and in-person) 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 (845) 518-1188 for emergency issues.

Tournament Overview

Note: 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)** and **Annenberg Hall** at Northwestern University's Evanston campus.
 - KGH Address: [2211 Campus Dr, Evanston, IL 60208](#).
 - Annenberg Address: [2120 Campus Dr, Evanston, IL 60208](#)
 - [Annenberg Room Map](#)
 - Teams are responsible for arriving at KGH/Annenberg on their own.
- Parking is available at multiple locations on Northwestern's campus. More information is [here](#).

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
- Any teams found in violation of these guidelines may be banned from participating in future NET competitions.

In-Person Schedule

POWER ROUND: Monday 3/27/2023 to Thursday 3/30/2023

Teams will complete the Power Round asynchronously. The time limit is 2 hours. The Power Round will be emailed to teams (advisors and all registered team members) at their previously determined time and **should be submitted by the end of the 2hr 30min time window (30-minute grace period)** by emailing your answers as a pdf to nuecontournament@gmail.com.

NET HYBRID EVENT: Saturday 4/1

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](#).
 - **Mark Witte's** research deals with applied questions in macroeconomics and public finance. His main interests are in consumption theory and topics in taxation. His teaching interests include macroeconomics, money and banking, public finance, and the economics of the environment and the extraction of natural resources. He has been voted onto the Associated Student Government honor roll numerous times in recognition of both his teaching and student advising. He has been honored with a Weinberg College of Arts and Sciences (WCAS) Distinguished Teaching Award, and a WCAS Distinguished Leader in the Undergraduate Community Award.

10:00-12:30pm - First Round Econ Bowl

- Location: Provided on the day of the tournament
- Description: Teams will compete head-to-head in 5 sequential rounds. 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 Robert Gordon](#)
 - Topic: “Where Has the Economy Been and Where Is It Going?”
 - **Robert Gordon** is a macroeconomist with a particular interest in unemployment, inflation, and both the long-run and cyclical aspects of labor productivity. He is the author of a textbook in intermediate macroeconomics, now in its 12th edition, and has completed a new book, *The Rise and Fall of American Growth*, published by the Princeton University Press in January 2016. He is a Fellow of the Econometric Society and the American Academy of Arts and Sciences. In 2014 he was elected as a Distinguished Fellow of the American Economic Association. In 2016 he was named by Bloomberg as one of the 50 most influential people in the world. For more than three decades, he has been a member of the National Bureau of Economic Research's Business Cycle Dating Committee, which determines the start and end dates for recessions in the United States.

2:00-3:00pm - Final Econ Bowl Rounds

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

3:00-4:00pm - Econ Activities

- Location: Annenberg
- 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 the diminishing marginal returns of labor in “The Candy Game” and market efficiency through “The Ultimatum Game.”

4:00-4:30pm - Professor Talk

- Location: Kellogg 1410
- Featuring [NU Professor Scott Ogawa](#)
 - Topic: Finding the (Nash) Equilibrium
 - **Scott Ogawa** is a professor of Economics at Northwestern University. Scott Ogawa's research focuses on the economics of education and the decisions of students and teachers. He has applied the techniques of experimental economics to ask whether students who pay more for their education put forth

more effort. More generally, he is interested in the behavioral effects of price on product utilization. He has been a fellow for the Searle Center for Teaching Excellence and has a strong interest in undergraduate economics education.

4:30-5:00pm - Northwestern Undergraduate Q&A Panel

- Location: Kellogg 1410
- Description: Students will have the opportunity to ask questions to the underclassmen of 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!

5:00-5:30pm - Northwestern Economics Career Panel

- Location: Kellogg 1410
- Description: Students will have the opportunity to ask questions to the upperclassmen and alumni of the NET team. These questions can be about economics classes at NU, networking, internships, academia, and more!

5:30-6:00pm - In-Person Award Ceremony

- Location: Kellogg 1410
- Description: All teams will come together for the award ceremony and the conclusion of the In-person component of NET 2023. Power Round results will be announced at the Virtual Closing Ceremony on Sunday.

6:00-6:30pm - 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 4/2

12:30-1:00pm - VIRTUAL Closing Ceremony

- Location: Zoom
- Description: All NET23 Teams will join virtually to receive awards for the overall winners of the Power Round and Virtual Econ Bowl.

Competition Rules

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.
- Each team should designate a team captain, who will be responsible for answering bonus questions.

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 a single 6 question exam for each division.
- 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)
- 17.5% Current Events
- 17.5% Economic History
- 10% 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 up to 6 free response questions in 120 minutes.
- Each question is worth the same number of points (excluding bonus parts), 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.
- The two lowest-scoring questions will not be considered in the final score.
- 2 weeks prior to the date of the in-person competition, teams will be emailed about what day(s) of the following week they plan to take the test.
- Tests will be sent out to teams based on when they indicate they are taking the test(s). Answers are expected to be submitted within a 2 hour window after receiving the test. Teams will be given a 30 minute grace period to submit their solutions.
- Calculators and notes are allowed, 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: the Preliminary Rounds and the Single Elimination Bracket.

ECON BOWL RULES (IN-PERSON)

The in-person Econ Bowl rules are largely retained from the NET 2022 competition. Some rules have changed, so please read through the rules carefully.

Format

- The Econ Bowl consists of two stages:
 - Preliminary Rounds: The first three preliminary round pairings are determined completely randomly. The final two pairings will be determined based on each team's records after the first two rounds. Teams with similar records will be paired.
 - Single Elimination: The top 4 teams will advance to a single elimination bracket. The semifinal matchups will be random. The winner of the single elimination bracket 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.
- The top four teams with the best Win/Loss record from the Preliminary Round will advance to the single-elimination Bracket.

Tiebreakers

- In the event that two teams are tied in the Preliminary Round 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 before the next question is read 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
- In-Person Econ Bowl: Overall Champion Team:
 - Official NET Champion Plaque
 - \$100 prize
- In-Person Econ Bowl: Overall Semifinalists:
 - Official NET 2nd Place Plaque
- Virtual Econ Bowl: Overall Champion Team:
 - Certificate of recognition signed by the Northwestern Economics Department Chair
 - \$100 prize

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.