



NORTHWESTERN ECONOMICS TOURNAMENT

Event Handbook

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Quick Reference

Event Schedule:

See below!

Econ Bowl Time Slots:

Link

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 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 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

Zoom

NET 2023 will be held virtually for those teams unable to attend in-person. Please see below for more details on Zoom links, etiquette, and troubleshooting.

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

Zoom Information and Etiquette

- All synchronous events will be held using Zoom. Before the event, please make sure that Zoom is downloaded and updated, all participants have a Zoom account, and all aspects of the program are running smoothly.
- **Do not publicize any NET Zoom links**, this includes, but is not limited to, forwarding links to students who are not registered or posting links on social media.
- **Do not make any recordings of any part of NET.**
- The Econ Bowl will be held during a 30-minute slot. During your scheduled slot, please observe the following etiquette:
 - Arrive 5 minutes early and be prepared to wait in the Waiting Room to ensure that the Econ Bowl round can be completed during your time slot.
 - Students' Zoom names should match the names given for registration.
 - Keep your video on for the entire duration of your Econ Bowl slot.
- The Educational Events, which include the Opening and Closing Ceremonies, the Professor Talks, and the Undergraduate Q&A, will be in a Zoom webinar format, while the Econ Bowl will be held as a normal Zoom meeting.
- For the Econ Bowl, participants should be in a quiet environment with no distractions where talking is permissible.
- Any teams found in violation of these guidelines may be banned from participating in future NET competitions.

Troubleshooting

- Before the day of the tournament, teams should make sure that Zoom is working properly and fully updated in order to ensure a smooth event.
- Here are a few tips:
 - Ensure that all students and advisors can easily access the Zoom links to the educational events and Econ Bowl slots.

- Check on the strength and stability of your internet connection. It should be able to support your video and audio capabilities through Zoom.
 - Before your Econ Bowl slot, test your audio and video to make sure that they are working well.
- If you encounter any technical issues during any of the events, please get in contact with the NET team.
 - If you or one of your team members are disconnected during the Opening, Closing, or any of the Educational events, feel free to return to the event when possible.
 - If you or one of your team members are disconnected or experience a poor internet connection during your Econ Bowl slot, time will be paused until they reconnect. If there is a more severe issue, play will continue without that team member.

Virtual 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

9:30-10:00am - Welcome Ceremony (HYBRID)

- Location: Zoom
- Description: All teams gather in a hybrid event 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.

1:30-2:00pm - Professor Talk (HYBRID)

- Location: Zoom
- 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.

4:00-4:30pm - Professor Talk (HYBRID)

- Location: Zoom
- 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 (HYBRID)

- Location: Zoom
- 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 (HYBRID)

- Location: Zoom
- 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, and more!

NET VIRTUAL EVENT: Sunday 4/2

9:00-10:30am - Econ Bowl First Round Time Slots

- Location: Zoom Links will be sent to each team before their respective times.
- Description: Teams will compete virtually through Zoom following the rules outlined below.

11:00-12:00pm - Econ Bowl Semifinal and Final Round

- Location: Zoom Links will be sent to each team.
- Description: The top 4 teams from the First Round will compete to determine the final Virtual Econ Bowl Champion.

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

- Location: Zoom
- Description: All NET23 Teams will join virtually to announce and celebrate the overall winners of the Power Round and Virtual Econ Bowl. The Closing Ceremony will also be recorded for teams unable to attend synchronously.

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 VIRTUAL TEAMS

TOURNAMENT STRUCTURE: VIRTUAL

- The Power Round is a team-based free-response written exam.
- The virtual Econ Bowl consists of three stages: the Preliminary Round, the Semifinal Round, and the Final Round
 - In the Preliminary Round, two teams will enter a Competition Room (in the form of a Zoom meeting) with the NET moderators. Teams will verbally answer a series of economics questions for points, competing head-to-head with another predetermined team. Each team will play two matches in the Preliminary Round against two different opponents. Teams' overall scores will be compared once all teams have competed in the Preliminary Round.
 - The four teams with the highest scores in the Preliminary Round will advance to the Semifinal Round, which has a similar format to the Preliminary Round.
 - The winning teams for the Semifinal Round will compete in the Final Round. The team with the highest score in the Final Round will be announced as winner of the virtual Econ Bowl.

ECON BOWL RULES (VIRTUAL)

*The Virtual Econ Bowl rules have changed from the NET22 competition. We are using a **completely new format** so please read through the rules carefully.*

Structure and Eligibility

- All times will be published in Central Daylight Time (UTC-05:00), which is the local time in Chicago. Teams outside of this time zone are responsible for converting published times into their local time zone.
- All players, alternates, and advisors should ensure that they have a functioning Zoom account and a stable Internet connection.
- Members of a team can join the Zoom room individually from their own devices (i.e. if all students are at home), or together from the same device (i.e. if all students are in the same room), or some combination of the two. In any case, please ensure that all team members can be heard and seen.
- A team includes four players and an optional alternate. Only four students from each team shall compete at a time. The alternate may join the Zoom meeting but cannot communicate with the four competing students. In the event that one player disconnects in the middle of a question, the remaining members of the team should continue competing. Prior to starting the next question, teams should wait for the player to disconnect. If a player is unable to connect after a

substantial period of time, their team may be forced to continue without them. If a substitution is necessary, the remaining players should indicate to the moderator that they are substituting a player, after which the substituting player joins the competing students. If only three students are able to connect, the team is still eligible to compete.

Format

- The competing team members, the advisor, and the team alternate (if applicable) will join their scheduled Zoom meeting with the NET moderators.
- Teams will compete head-to-head across two matches in the Preliminary Round.
- Teams' aggregate scores across two Preliminary Round matches will be compared to determine advancement into the semifinal round.
- The winner of the Semifinal and Final rounds will be determined by which team has the most points at the end of the round.
- **Please join your Econ Bowl Zoom meeting five minutes early.** Ensure your name on Zoom matches the name used in registration. You may be placed in a waiting room before entry.
- The rounds will consist of 10 questions per team for a total of 20 questions.
- Each team will be given a 10-second time window after the reading of the question to provide their answer. Thus the overall approximate time per round will be 10 minutes of competition and 20 minutes for introductions, questions, and practice questions, along with any possible technical difficulties.
- Each team should have their video on for the duration of the Econ Bowl slot. Teams will discuss their answer through the Zoom call. We encourage each member to have their own Zoom screen, but this is not a requirement.

Moderation

- After a brief introduction to NET and a quick clarification of the rules by the moderator, we will do two practice questions to adjust to the new format.
- Before each question, the moderator will state the team that will have the first opportunity to answer. The moderator will then read the question out loud.
- The team with the first opportunity to answer will have 10 seconds to discuss and reach a consensus. This time window will start immediately after the moderator finishes reading the question.
- To answer the question, any competing team member must say "FINAL ANSWER" then state their answer. We recommend that teams designate one person (for example, the team captain) to deliver the final answer. However, any of the four competing team members may answer.
- If a question is answered correctly, the team will receive one point.
- If a question is answered incorrectly, the team will receive no points and the opposing team will be given an opportunity to answer the question. The

opposing team will have 10 seconds to discuss and reach a consensus. If they answer correctly, they will receive one point.

- Technical difficulties aside, questions will generally not be re-read.
- When a question is answered, the moderator will immediately announce if the answer was correct and then start the next question.
- Each team is guaranteed the first opportunity to answer 10 total questions, with then 10 opportunities to “steal” the other team's question if the other team gets all of their questions wrong. Therefore, the maximum possible number of points per match is 20. If both teams answer all of their questions correctly each team will receive 10 points.

Acceptable Answer Formats

- For short answer questions, equivalent wordings will be accepted. Numerical answers must be given in exact and simplest form.
- Team members must say “FINAL ANSWER” before stating the answer.
- If a team member states their final answer without saying “FINAL ANSWER,” the answer does not count. There is no penalty, but it will waste time.

Scoring

- Questions
 - Each question will have the same point value (1), there are no fractional point values.
 - Incorrect answers receive 0 points.
 - Under no circumstances will points be subtracted from a team’s score total.
- The two teams with the highest scores after the Preliminary Round will proceed to the Semifinal Round.

Tiebreakers

- Teams’ Power Round scores will be used to determine ties. In the event that exactly four teams are tied in their Preliminary score, all teams will advance to the Semifinal Round. If more than four teams are tied, teams’ Power Round scores will be used to determine which team(s) advances.
- In the Semifinal and Final rounds, ties will be broken via the following hierarchy of tiebreakers:
 1. Overall number of points (including those from the Preliminary Round)
 2. Power Round scores
 3. In the highly unlikely event that teams are tied in their overall number of points AND their Power Round score, a runoff set of questions (with the same rules and timing) will be administered to both teams shortly following the Final Round.

Challenges

- There are two types of challenges: rules and content challenges.

- For the virtual competition, challenges can come from the four players, the alternate, and the coach.
- Rules challenges relate to scoring or the application of the rules (e.g. scoring). Judgment calls by moderators 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 to issue at most two unsuccessful content challenges per round.

Troubleshooting Protocol

- If an answer is accidentally revealed before the team provides its answer, a corresponding backup question of similar style, length, and difficulty will be selected by the moderator.
- If a participant disconnects, the timer will not be stopped and the current question will be finished. After the current question is completed, the round will pause.

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 internet-accessing devices may be used by players, coaches, substitutes, or spectators once the match has started, with the exception of the device used to participate in the Zoom call.
- If the moderators see any unauthorized electronic device being used during the match, the person possessing the device must leave the Zoom call for the rest of the match.
- Any technical malfunctions (i.e. Zoom crashing; internet connection failing) will be dealt with on an individual basis.
 - If a participant loses connection during a question, remaining team members will finish the current question, then time will pause. We will then resolve the issue and resume when we can.
 - The same procedure follows if a NET team member is disconnected. If all NET members in the call disconnect, call the NET phone hotline (only if inside the US or Canada) or email us at nuecontournament@gmail.com (if international)

- We will do our best to accommodate technical issues, but players with more severe problems may be asked to sit out of the remainder of the round.
- Any adjustments to the round, for example, due to connection issues, will be at the discretion of a round's moderators.

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.