SYLLABUS

INTERNATIONAL
ECONOMICS OLYMPIAD

This version of the Syllabus was approved by the International Board on 31/12/2025.

1. General

1.1. National education systems and curricula vary in terms of structure and content, but the tasks of the IEO are composed in a way that facilitates equal competition. The tasks are not aimed primarily at testing the knowledge of theory. A significant share of the tasks is practical-oriented, test analytical skills and curiosity. The IEO tasks are created considering that its contestants are predominantly students of (senior) high school, or level 3 according to UNESCO International Standard Classification of Education (ISCED 2011). Yet, provided that the IEO is a worldwide selective competition for national teams, some tasks on the topics that are outside the scope of a traditional high school curriculum may appear.

1.2. The *Economics and Finance* part of the competition is individual. The competition in *Business Case* is a team competition.

1.3. The maximum final points for the parts of the competition are:

- 150 for the Economics and Finance part,
- 50 for the Business Case part.

1.4. In every part of the competition, the result is first computed in raw points. Raw points are then normalized to get the final points according to the following procedure.

Let G_i be the raw score of the contestant (or team in the Business Case part) *i* in the part of the Olympiad, A — the average of all raw scores, σ — standard deviation of all raw scores. Then we define Z-score of the contestant *i* as:

$$Z_i = (G_i - A)/\sigma.$$

The final result of the contestant (team) *i* is then calculated as follows:

$$F_i = M/2 \times (1 + Z_i/2).$$

Where M is the maximum possible result of this part (in final points) specified in **1.3**.

If, after this calculation, $F_i < 0$, then the contestant's (team's) final score is set equal to 0.

If some scores change in the process of moderation, Z-scores and final scores are recalculated.

1.5. The total **individual result** of a contestant is calculated as a sum of Economics and Finance final score and the contestant's team Business Case final score. Ties are broken by taking the score from the Economics and Finance part.

1.6. The total **team result** of a team is calculated as a sum of:

- The average final score of the team members in the Economics and Finance part divided by 1.5;
- The team score in the Business Case part.

Ties are broken by taking the team score from the Business Case part.

2. Economics and Finance

2.1. The tasks in Economics and Finance should test contestants' understanding of basic economic and financial (including financial literacy) concepts and models, ability to apply them, their curiosity about the fields, and analytical skills.

2.2. Theoretical models will often be applied to modern real-world settings such as platform markets, digital payments, AI-driven productivity, climate transition, and supply-chain shocks, while remaining solvable with the knowledge of topics listed below. Questions may require interpreting empirical graphs/tables and reasoning from evidence (correlation vs plausible causal mechanisms) at an intuitive level.

2.3. The Economics topics discussed in the questions are the following:

- Economics principles and an economist's worldview
- Microeconomics:
    - Competitive markets (demand and supply, elasticities, equilibrium)
    - Consumer's choice
    - Firm's behavior
    - Non-competitive markets
        - monopoly, oligopoly, monopolistic competition
        - digital platforms & network effects
        - pricing in the digital economy (freemium, bundling, personalized pricing, etc.)
    - Government interventions in competitive and non-competitive markets
    - Market failures (externalities, public goods, asymmetric information)
    - Labor market
    - Game theory: Nash equilibrium, cooperation and coordination problems, commitments, repeated games
    - Innovations
- Macroeconomics:
    - Macroeconomic data: measuring income, inflation and unemployment
    - Technology and long-run growth;
    - Labor market
    - AD-AS model
    - Money and the role of banks
    - Monetary and fiscal policy
    - Economic fluctuations and crises
    - Institutions and Inequality

- International economics:
    - Specialization and gains from trade
    - Protectionism: winners and losers
    - Currencies, currency unions, exchange rates, and Interest rates parity
    - Economics of the environment and sustainable development
- Frontiers and evidence in modern economics:
    - major contemporary questions
    - how economists use data; natural and field experiments.

2.4. The Finance topics discussed in the questions are the following:

- **Financial Planning**: Income, expenses, and debt management, financial goals. Budgeting.
- **Banks and the Banking System**: Financial institutions facilitating savings, credit, and payments. Deposits, loans, interest rates, the role of the central bank.
- **Saving Money:** Setting aside money for future use, earning interest. Savings accounts, compound interest.
- **Borrowing Money, Credit**: Using borrowed funds with a promise to repay with interest. Credit cards, loans, credit score, interest rates.
- **Investment, Financial Instruments, and Risk Management**: Allocating money to generate returns while managing risks. Time value of money. Stocks, bonds, diversification, risk vs. return, derivatives.
- **Insurance Contracts and Insurance Market**: Risk management through financial protection against potential losses. Premiums, coverage, deductibles, liability.
- **Financial Fraud and Ponzi Schemes**: Deceptive practices to steal money or assets. Phishing, pyramid schemes, Ponzi schemes, regulatory measures.
- **Crowdfunding**: Raising funds from many contributors for projects or causes. Platforms, donation-based, equity-based.
- **Cryptocurrencies**: Digital currencies secured by cryptography and operating on blockchain. Cryptocurrencies, blockchain, volatility, decentralized finance.

2.5. The main recommended textbook for Economics is *The Economy 2.0: Microeconomics* and *The Economy 2.0: Macroeconomics* by the *CORE Econ* project. The textbooks are available at https://www.core-econ.org.

A supplementary recommended textbook for preparation is *Principles of Economics* by N. Gregory Mankiw (the newest edition). Contestants can also use other A-level, International Baccalaureate, or principles level economics textbooks as supplementary sources.

For Nobel Memorial Prizes (often relevant to "frontiers and evidence" section) , see the website: https://www.nobelprize.org/prizes/lists/all-prizes-in-economic-sciences/.

2.6. The recommended resources for Finance are:

- *The Economy 2.0: Microeconomics* (Unit 9 "Lenders and borrowers and differences in wealth") (https://core-econ.org/the-economy/)
- Personal Finance course by GFLEC (https://gflec.org/education/personal-finance-course/)
- Money Smart for Young Adults curriculum (https://www.fdic.gov/resources/consumers/money-smart/teach-money-smart/money-smart-for-young-adults.html)
- Personal Finance Curriculum by PWC (High School Lessons) (https://www.pwc.com/us/en/about-us/corporate-responsibility/access-your-potential/financial-literacy-curriculum.html)
- Khan Academy courses on finance (https://www.khanacademy.org/college-careers-more/personal-finance, https://www.khanacademy.org/economics-finance-domain/core-finance)
- Other freely available sources on finance and financial literacy.

2.7. The Economics and Finance part comprises two components: Multiple Choice Questions (MCQs) and Open Questions (OQs). The tests for MCQs and OQs may be administered on the same day or separate days, in any order, as determined by the Steering Committee and approved by the Problem Committee.

2.8. There are 40 MCQs, answers to all of them are graded. Scoring is as follows:

- Correct answer: +2 raw points
- Incorrect answer: −0.5 raw points
- Unanswered question: 0 raw points

The MCQ test lasts for 90 minutes.

2.9. The competition includes 5 Open Questions (OQs), each worth a maximum of 30 raw points. Although the Jury grades all OQs, only 4 questions or fewer for each contestant contribute to their final score.

Contestants who submit solutions to all 5 questions must clearly indicate which single question should be excluded from the score. If a contestant fails to specify an exclusion in this case, the question with the maximum score will be automatically excluded.

The OQ test lasts for 155 minutes.

2.10. Open questions are graded with full or partial credit depending on the contestant's progress. The following principles are used.

2.10.1. The Jury reviews papers according to grading schemes. In the case of a contestant's work containing a solution fragment that cannot be assessed based on the grading scheme, the Jury makes a decision based on its understanding of fair assessment, possibly consulting with the Problem Committee. The Jury assesses only what is written in the contestant's paper.

2.10.2. Fragments crossed out by the contestant in their paper are not reviewed by the Jury. If a contestant wants to undo the crossing out, they must explicitly write in the paper that they wish the crossed-out part to be evaluated. If it is impossible to determine conclusively whether the contestant wanted the solution fragment to be assessed, that fragment is not evaluated.

2.10.3. Contestants must present their solutions in clear English language. The Jury does not deduct points for language mistakes, corrections, spelling, punctuation, and stylistic errors or deficiencies in paper formatting, as long as the contestant's solution is understandable.

2.10.4. All statements in the contestant's solution must either be commonly known (standard) or logically follow from the question or the contestant's previous reasoning. A contestant does not need to prove commonly known statements. Generally, facts repeatedly used in previous International Economics Olympiads without proof in official solutions are considered commonly known, as well as standard high school curriculum material. All non-commonly known facts not trivially derived from the question must be proven. A solution explicitly or implicitly relying on unproven non-commonly known facts is rated with a partial score.

2.10.5. Contestants can solve questions using any correct method. The Jury does not increase scores for elegance or conciseness of the solution, nor does it decrease scores for using an unconventional method. A correct solution may deviate from the official one in its method. The length of the solution does not directly impact the evaluation; if a contestant writes a lengthy text without advancing the solution, it should be scored zero.

2.10.6. The contestant's work should leave no doubt about the method of solving the question. If a contestant presents multiple solutions to a question that are substantially different (potentially leading to different answers), and some of the solutions are incorrect, the Jury is not obligated to choose and evaluate the correct solution.

2.10.7. If the contestant's solution contains contradictory statements, they are generally not evaluated, even if one of them is correct. Violation of logical sequences (cause-and-effect relationships) typically results in a significant reduction in the score.

2.10.8. The contestant's work must include evidence of the completeness and correctness of their answer. The method of obtaining the answer, if not required for proving its completeness and correctness, is optional to present.

2.10.9. Penalties assigned by the Jury for computational errors depend on the severity of the consequences. Computational errors that did not significantly alter the subsequent solution of the question and made it substantially simpler are penalized with fewer points than errors that had a substantial impact regardless of the impact on the final conclusion. The grading key should specify the exact penalties for arithmetic mistakes whenever possible.

2.10.10. If a question has multiple parts, the contestant must clearly indicate where the solution to each part begins. If a contestant's solution to one part of the question includes a solution fragment that, according to the marking scheme, can earn points for another part of the question, the Jury may choose not to award those points if it is not evident that the contestant understands the applicability of the results to another point. When solving question parts, contestants can refer to their own solutions (answers) to other parts.

2.10.11. If an error occurs in the initial parts of a solution and it changes the contestant's answers in subsequent parts, the scores for subsequent parts are generally not reduced. They are evaluated as if the contestant's own results, used by the contestant, were correct. Exceptions occur when errors in the initial parts simplified or qualitatively distorted the logic of the subsequent solution — in these cases, scores for subsequent parts may be significantly reduced.

2.10.12. If additional assumptions are necessary for the contestant's solution, they must be formulated. These additional assumptions should not change the meaning of the question and significantly narrow the range of situations discussed in the solution compared to those specified in the condition.

3. Business Case

3.1. The competition in business is a team competition and includes the oral presentation of the results. Presentations must be supported by slides. The presentations should be in English.

3.2. The Business Case part lasts for two days — 1) day of preparation; 2) day of the presentation. During the day of preparation, contestants may use any online and offline materials, but it is prohibited to contact other people for help. All teams submit their slides by the deadline specified by the Steering Committee prior to the IEO Opening Ceremony. No changes to slides are allowed after this time.

3.3. On the day of presentation, teams are divided into groups. Each group is assigned a separate panel of judges.

3.4. The top team from each group is invited to the public Business Case Finals. In the Finals, teams are to present their solution again and be graded by a panel of judges.

3.5. The organization responsible for the creation of the Business Case prepares a case-specific scoring guide, based on which teams' raw scores are produced. The scoring guide should include grading rubrics, benchmarks or ranges for key assumptions where applicable, a list of core analytical elements expected to be addressed by participating teams, an exemplar solution of the proposed Business Case, stated briefly or in detail.

Raw scores are counted as a sum of scores for each criterion. The score for each criterion is the median of scores for this criterion given by each judge of the panel. The final result of a team participating in the Business Case Finals is the maximum of two results: in a group stage and in Finals.

3.6. The competencies contestants are expected to have for a successful business case solution:

Analytical thinking: the ability to structurally approach the solution of a complex business problem, correctly dividing it into streams (into directions within which the solution of the problem may lie).

As a rule, the team should divide the case into some large blocks, which, in turn, are further divided and so on to the level of specific problems. A good structure corresponds to the *MECE* principle (mutually exclusive, collectively exhaustive), that is, it covers all possible solutions, but each individual stream does not intersect with others.

Conceptual thinking: the ability to build correct hypotheses based on the resulting structure, made by analysis. Here the team checks how ideas respond to the necessary request and correctly address these or other problems of the enterprise, the team also makes sure that these solutions are feasible and have a common and business sense.

Quantitative thinking: no case can be solved without simple but fast calculations and more complex models that illustrate certain analyzes.

Communication skills: the ability to correctly build a presentation and to answer questions.

3.7. The following literature is recommended for preparation.

Useful literature for case solving:

- The Pyramid Principle, Barbara Minto;
- Crack the Case, David Ohrvall;
- The Trusted Advisor, D. Maister, C. Green, R. Galford.

Useful literature for data analysis:

- The McKinsey Way, Ethan Rasiel;
- Strategic Management, Thompson Strickland;
- The Fifth Discipline, Peter Senge;
- Thinking Fast and Slow, Daniel Kahneman;
- Case in Point, Marc Cosentino;
- BCG on Strategy, C. Stern, M. Deimler.

Useful literature for presentations:

- Say It With Charts, Gene Zelazny;
- Unfolding the Napkin, Dan Roam;
- Visualize This, Nathan Yau;
- The Pyramid Principle, Barbara Minto;
- Slide:ology, Nancy Duarte

3.8. In addition to books listed above, it is recommended to study the example cases that were used at the previous Olympiads and can be found here: https://ieo-official.org/prepare. Additional materials for preparation will be provided to the invited teams before the Business Case part.