## Term Information

## Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)
Propose course for new GE foundation in math and data analysis.
What is the rationale for the proposed change(s)?
Please see attached GE form for rationale.
What are the programmatic implications of the proposed change(s)?
(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

We anticipate no programmatic changes if this request is approved.
Is approval of the requrest contingent upon the approval of other course or curricular program request? No
Is this a request to withdraw the course? No

## General Information

| Course Bulletin Listing/Subject Area | Philosophy |
| :--- | :--- |
| Fiscal Unit/Academic Org | Philosophy - D0575 |
| College/Academic Group | Arts and Sciences |
| Level/Career | Undergraduate |
| Course Number/Catalog | 2540 |
| Course Title | Introduction to the Philosophy of Rational Choice |
| Transcript Abbreviation | Intro Rat Choice |
| Course Description | An introduction to various ways of conceiving of rationality and its subsequent role in individual and |
|  | collective decision-making, with an emphasis on rationality in ethics and how rationality might inform the |
| evaluation of social norms and social conventions. |  |
| Semester Credit Hours/Units | Fixed: 3 |

## Offering Information

Length Of Course
Flexibly Scheduled Course
Does any section of this course have a distance No
education component?
Grading Basis Letter Grade

Repeatable

## Course Components

Grade Roster Component
Credit Available by Exam
Admission Condition Course
Off Campus
Campus of Offering

14 Week, 12 Week, 8 Week, 7 Week, 6 Week, 4 Week
Never

Letter Grade
No
Lecture
Lecture
No
No
Never
Columbus, Lima, Mansfield, Marion, Newark, Wooster

## Prerequisites and Exclusions

Prerequisites/Corequisites
Exclusions
Electronically Enforced
No

## Cross-Listings

## Cross-Listings

## Subject/CIP Code

## Subject/CIP Code

38.0101

Subsidy Level
General Studies Course
Intended Rank
Freshman, Sophomore

## Requirement/Elective Designation

Mathematical and Quantitative Reasoning (or Data Analysis)
The course is an elective (for this or other units) or is a service course for other units
Previous Value

The course is an elective (for this or other units) or is a service course for other units

## Course Details

Course goals or learning objectives/outcomes

Content Topic List

Sought Concurrence
Previous Value

## Attachments

## Comments

- Explain a variety of ways of making sense of rationality and related concepts like agency, autonomy, social norms, efficiency, coordination problems, and utility;
- Evaluate the value of different conceptions of rationality for both individual and collective decision-making;
- Apply conceptions of rationality in various ethical contexts, including just and unjust social conventions.
- rationality
- rational choice

No
Yes

- 2540 to Math qua Data Analysis ge-foundations-submission form.pdf: GE form
(Other Supporting Documentation. Owner: Shuster,Amy Lynne)
- 2540 Syllabus.pdf: 2540 Sample Syllabus
(Syllabus. Owner: Shuster,Amy Lynne)

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## Workflow Information

| Status | User(s) | Date/Time | Step |
| :--- | :--- | :--- | :--- |
| Submitted | Shuster,Amy Lynne | $01 / 31 / 202309: 35$ AM | Submitted for Approval |
| Approved | Samuels,Richard | $01 / 31 / 202309: 40$ AM | Unit Approval |
| Revision Requested | Vankeerbergen,Bernadet <br> te Chantal | $01 / 31 / 2023$ 09:55 AM | College Approval |
| Submitted | Shuster,Amy Lynne | $01 / 31 / 2023$ 10:03 AM | Submitted for Approval |
| Approved | Samuels,Richard | $01 / 31 / 2023$ 10:09 AM | Unit Approval |
| Approved | Vankerbergen,Bernadet <br> te Chantal | $02 / 15 / 202301: 56$ PM | College Approval |
| Pending Approval | Jenkins,Mary Ellen Bigler <br> Hanlin,Deborah Kay <br> Hilty,Michael <br> Vankeerbergen,Bernadet <br> te Chantal <br> Steele,Rachel Lea | $02 / 15 / 202301: 56$ PM | ASCCAO Approval |

## PHILOS 2540

# Introduction to the Philosophy of Rational Choice 

The Ohio State University, Spring Semester 2024<br>9:35 AM to 10:55 AM (Wednesday-Friday)<br>Derby Hall 029

Instructor Information
Instructor: Sahar Heydari Fard
Email: heydarifard.1@osu.edu
Office: 372, University Hall
Office hours: Wednesday-Friday 11:00 AM to 12:00 PM

Course Description

## PHILOS 2540 Introduction to the Philosophy of Rational Choice

3 Credits
An introduction to various ways of conceiving of rationality and its subsequent role in individual and collective decision-making, with an emphasis on rationality in ethics and how rationality might inform the evaluation of social norms and social conventions.

Grading status: Letter grade

## GE Information

This course satisfies the GE requirement for Mathematical and Quantitative Reasoning Foundation.
This course is a brief introduction to rational choice theory and its philosophical, political, and economic significance. It surveys dominant formal views of rationality and the normative constrains they impose on actions and decisions. It includes the foundations of logical reasoning, decision theory and the use of statistical data for decision making under uncertainty, game theory, and social choice theory. In addition to discussions about background assumptions and philosophical implications of these theories, this course investigates their real-world application particularly from ethical, socio-political, and economic standpoints. It provides tools to model real work problems while attending to the limitations of these models and the contextual/historical information that are salient for a proper understanding or potential of solution to them.

## Goal

Successful students will be able to apply quantitative or logical reasoning and/or mathematical/ statistical methods to understand and solve problems and will be able to communicate their results.

## Expected Learning Outcomes

Successful students are able to:
1.1 Use logical, mathematical and/or statistical concepts and methods to represent real-world situations.
1.2 Use diverse logical, mathematical and/or statistical approaches, technologies and tools to communicate about data symbolically, visually, numerically and verbally.
1.3 Draw appropriate inferences from data based on quantitative analysis and/or logical reasoning.
1.4 Make and evaluate important assumptions in estimation, modeling, logical argumentation and/or data analysis.
1.5 Evaluate social and ethical implications in mathematical and quantitative reasoning.

## Required Texts

- Gerald Gaus and John Thrasher, On Philosophy, Politics, and Economics: An Introduction, Princeton University Press, 2021
- All other course readings posted on Carmen.


## Course Requirements and Weights

| Quizzes | $20 \%$ |
| :--- | ---: |
| Critical Responses to Presentations (4*1 page) | $5 \%$ |
| Participation | $20 \%$ |
| Group Presentation | $10 \%$ |
| Final Paper (3-5 pages) | $15 \%$ |
| Exam * 3 | $30 \%$ |
| Extra Credits | $2 \%$ |

## QUIZZES (20 points, 2 point each)

Every session, we have a short quiz that covers the reading material assigned for that session and includes one short ( $100-300$ words) essay question. Each quiz is worth $1-2 \%$ of your total grade and its deadline is before the beginning of the class. The goal of these quizzes is to highlight the important aspects of the reading material for that week to help you practice writing regularly, and to provide incentives for staying on top of the reading assignments.

## CRITICAL RESPONSE TO PRESENTATIONS (5 points, 1.25 points each)

You will be asked to critically reflect on the presentations given by other students. You need to turn in one critical response every session for the last give sessions of this class. Each critical response needs to be 1 page max and identify the main argument, its background assumptions, and it's potential weaknesses.

## GROUP PRESENTATION (10 points)

The last module of this class is designated to your group presentations. You will need to work in groups of 2-3 and present a topic of your choice relevant to class discussions. Your group will have 30-40 minutes to present the topic and lead a discussion. I will share a rubric and a template as a suggestion to give you a good idea about what is expected from this presentation.

## PARTICIPATION (20 points)

Participating in class discussion is extremely helpful for doing well in the course. Your participation grade will be determined by your attendance, level of engagement in the class discussions and activities, and following the conversation rules that we will come to together in the class.

The final paper (2-3 pages) is a practice for critical engagement with a philosophical question. You will be asked to engage with the material we have read in the class. I strongly recommend you use the same topic for this paper as you used for your group presentation. More instructions about this paper will be provided in class.
*If you need an extension for either of these two papers, reach out to me before the deadline. Late papers without an extension will not be accepted.

EXAMS (online, take-home, and 10 points each)
Each of these exams is worth $10 \%$ of your final grade. You will be taking these exams online, at home, and during the class time. They involve some basic calculation questions in addition to some essay questions. I will provide a sample exam a weak prior to each exam.

## EXTRA CREDIT (2 points)

You can earn extra credit for participating in philosophy talks throughout the semester. By providing a summary of the talk as instructed on Carman, you can gain up to 2 points (each talk will be 0.5 points)

Grade Scale

| A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | F |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $93-$ | $90-$ | $87-$ | $83-$ | $80-$ | $77-$ | $73-$ | $70-$ | $67-$ | $63-$ | $60-$ | $<60 \%$ |
| $100 \%$ | $92 \%$ | $89 \%$ | $86 \%$ | $82 \%$ | $79 \%$ | $76 \%$ | $72 \%$ | $69 \%$ | $66 \%$ | $62 \%$ |  |

SCHEDULE OF READINGS AND ASSIGNMENTS (SUBJECT TO CHANGE)

| Date | Reading | Assignments |
| :---: | :---: | :---: |
| 1/11/2023 | Rationality (p. 6-34) | WA |
| 1/13/2023 | Jones-Gender and Rationality | Quiz 1 |
| 1/18/2023 | Samuels and Stich-Rationality and Psychology | Quiz 2 |
| 1/20/2023 | Markets, welfare, and path dependance (p. 82-94) | Quiz 3 |
| 1/25/2023 | Hayek-The Use of Knowledge in Society | Quiz 4 |
| 1/27/2023 | No Class-Externalities and Rights (p. 94-103) + Mills (Excerpts) | Quiz 5-Optional |
| 2/1/2023 | Public Goods (p. 103-109) + Anderson, "Beyond Homo Economicus" | Quiz 6 |
| 2/3/2023 | Exam 1 | Quiz 7 (study guide) |
| 2/8/2023 | Conflictual Games (p. 112-127) | Quiz 8 |
| 2/10/2023 | Coordination Games (p. 128-140) | Quiz 9 |
| 2/15/2023 | Skyrms-The Stag Hunt | Quiz 10 |
| 2/17/2023 | Mixed Strategies (p. 140-157) | Quiz 11 |
| 2/22/2023 | Repeated and Evolutionary Games (p. 160-176) | Quiz 12 |
| 2/24/2023 | Signaling Games and Bargaining (p. 177-190) | Quiz 13 |
| 3/1/2023 | O'Connor-The Emergence of Intersectional Disadvantage | Quiz 14 |
| 3/3/2023 | Exam 2 | Quiz 15 (study guide) |
| 3/8/2023 | Conventions and Social Norms (p. 192-209) | Quiz 16 |
| 3/10/2023 | Mackie-Foot Binding | Quiz 17 |
| 3/15/2023 | Spring Break |  |
| 3/17/2023 | Spring Break |  |
| 3/22/2023 | Institutions (p. 212-218) | Quiz 18 |
| 3/24/2023 | Social choice and collective rationality (p. 220-230) | Quiz 19 |
| 3/29/2023 | Condorcet Voting (p. 230-253) | Quiz 20 |
| 3/31/2023 | Exam 3 | Quiz 21 (study guide) |
| 4/5/2023 | Selected Topics |  |
| 4/7/2023 | Selected Topics |  |
| 4/12/2023 | Presentations | Critical Response 1 |
| 4/14/2023 | Presentations | Critical Response 2 |
| 4/19/2023 | Presentations | Critical Response 3 |
| 4/21/2023 | Presentations | Critical Response $4$ |

## *Final paper is due on April $24^{\text {th }}$.

## Course Policies and Resources

| Accessibility Resources | The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-2923307; slds.osu.edu; 098 Baker Hall, 113 W. $12^{\text {th }}$ Avenue. |
| :---: | :---: |
| Attendance Policy | If you need to skip a class, you must let me know ahead of time. Up to 3 excused absences will not affect your participation grade in any ways. But more than 3 absences will deprive you from in class graded assignments and activities that make up a significant portion of your participation grade. There is no way to make up for missed classes unless for these University Approved Absences: <br> 1. Authorized University activities <br> 2. Disability/religious observance/pregnancy, as required by law and approved by Accessibility Resources and Service |
| Mental Health | As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the $24 / 7$ |


|  | National Suicide Prevention Hotline at 1-800-273-TALK or <br> at suicidepreventionlifeline.org. |
| :--- | :--- |
| Academic <br> Misconduct | It is the responsibility of the Committee on Academic Misconduct to <br> investigate or establish procedures for the investigation of all reported <br> cases of student academic misconduct. The term "academic misconduct" <br> includes all forms of student academic misconduct wherever committed; <br> illustrated by, but not limited to, cases of plagiarism and dishonest <br> practices in connection with examinations. Instructors shall report all <br> instances of alleged academic misconduct to the committee (Faculty Rule <br> 3335-5-487). For additional information, see the Code of Student <br> Conduct http://studentlife.osu.edu/csc/. |
| Technology Use | We will not need to use computers or phone in the class, and they are often <br> a source of distraction. So, unless you have a good reason to use them that <br> you have shared with me, I expect you to not use your laptop or phone <br> during the class period. |
| Title IX | Title IX makes it clear that violence and harassment based on sex and <br> gender are Civil Rights offenses subject to the same kinds of <br> accountability and the same kinds of support applied to offenses against <br> other protected categories (e.g., race). If you or someone you know has <br> been sexually harassed or assaulted, you may find the appropriate <br> resources at http://titleix.osu.edu or by contacting the Ohio State Title IX <br> Coordinator at titleix@osu.edu |
| Religious <br> Accomodation | Our inclusive environment allows for religious expression. Students <br> requesting accommodations based on faith, religious or a spiritual belief <br> system in regard to examinations, other academic requirements or <br> absences, are required to provide the instructor with written notice of <br> specific dates for which the student requests alternative accommodations |
| at the earliest possible date. For more information about religious |  |
| accommodations at Ohio State, visit odi.osu.edu/religious- |  |
| accommodations. |  |

## Overview

Courses that are accepted into the General Education (GE) Foundations provide introductory or foundational coverage of the subject of that category. Additionally, each course must meet a set of Expected Learning Outcomes (ELO). Courses may be accepted into more than one Foundation, but ELOs for each Foundation must be met. It may be helpful to consult your Director of Undergraduate Studies or appropriate support staff person as you develop and submit your course.

This form contains sections outlining the ELOs of each Foundation category. You can navigate between them using the Bookmarks function in Acrobat. Please enter text in the boxes to describe how your class meets the ELOs of the Foundation(s) to which it applies. Because this document will be used in the course review and approval process, you should use language that is clear and concise and that colleagues outside of your discipline will be able to follow. Please be as specific as possible, listing concrete activities, specific theories, names of scholars, titles of textbooks etc. Your answers will be evaluated in conjunction with the syllabus submitted for the course.

## Accessibility

If you have a disability and have trouble accessing this document or need to receive the document in another format, please reach out to Meg Daly at daly.66@osu.edu or call 614-247-8412.

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# GE Rationale: Foundations: Mathematical and Quantitative Reasoning (or Data 

## Analysis) (3 credits)

Requesting a GE category for a course implies that the course fulfills all expected learning outcomes (ELOs) of that GE category. To help the reviewing panel evaluate the appropriateness of your course for the Foundations: Mathematical and Quantitative Reasoning (or Data Analysis), please answer the following questions for each ELO.

## A. Foundations

Please explain in 50-500 words why or how this course is introductory or foundational in the study of Mathematical \& Quantitative Reasoning (or Data Analysis).

This course is a brief introduction to rational choice theory and its philosophical, political, and economic significance. It surveys dominant formal views of rationality and the normative constrains they impose on actions and decisions. It includes the foundations of logical reasoning, decision theory and the use of statistical data for decision making under uncertainty, game theory, and social choice theory. In addition to discussions about background assumptions and philosophical implications of these theories, this course investigates their real world application particularly from ethical, socio-political, and economic standpoints. It provides tools to model real work problems while attending to the limitations of these models and the contextual/historical information that are salient for a proper understanding or potential of solution to them.

## B. Specific Goals for Mathematical \& Quantitative Reasoning/Data Analysis

Goal: Successful students will be able to apply quantitative or logical reasoning and/or mathematical/statistical analysis methodologies to understand and solve problems and to communicate results.

Expected Learning Outcome 1.1: Successful students are able to use logical, mathematical and/or statistical concepts and methods to represent real-world situations. Please link this ELO to the course goals and topics and indicate specific activities/ assignments through which it will be met. (50-700 words)

The introduction of every formal topic in this class is coupled with papers that apply these topics to current and tangible problems (ranging from current examples of conflict in international relations to the prediction of local and national voting patterns). Moreover, class discussions are shaped around case studies and real-life examples. In these discussions, students are asked to use formal tools and game structures to model interactions in various case studies and to use empirical data and statistical analysis to test the explanatory power of their models. The second and third exams evaluate students' ability to describe interaction dynamics in real-world examples and build a model that explains or predicts the outcomes.
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Expected Learning Outcome 1.2: Successful students are able to use diverse logical, mathematical and/or statistical approaches, technologies, and tools to communicate about data symbolically, visually, numerically, and verbally. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met. (50-700 words)
In quizzes 1-6 and their corresponding material from week 1 to week 4, students practice
reconstructing various arguments in a symbolic form and evaluating their logical validity and
soundness. They also learn about interpreting statistical information and its use for
decision-making under uncertainty. Exam 1 evaluates logical reasoning skills and numerical
calculation of optimal decision makers (Bayesian decision theory). In quizzes 6-14 and the
corresponding material from week 5 to week 8 , students practice visualizing and modeling
interaction dynamics through payoff matrices and decision trees. Exam 2 evaluates these
skills. They also demonstrate their ability to communicate data symbolically, visually,
numerically, and verbally in their end-of-the-semester group presentations. They identify a
contemporary problem of their choice in which various tools of decision-making we discuss in
class can be beneficial. They form a question they seek to answer in their presentation and
are asked to provide a logically sound and valid argument to support their answer to this
question. They are also asked to back up their argument with empirical data and visualization
techniques they have learned in class.

Expected Learning Outcome 1.3: Successful students are able to draw appropriate inferences from data based on quantitative analysis and/or logical reasoning. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met. (50-700 words)

In quizzes 15-21 and the corresponding material from week 9 to week 12 , students practice evaluating the explanatory power of their models by comparing empirical (quantitative) data and the simulated data generated by their models. During these weeks, they see the application of their models in more comprehensive and tangible social discussions about social norms, social change, voting, theories of democracy, etc. They learn how to use their models or the quantitative data that backs them up to make inferences about social dynamics and their implications. Exam 3 evaluates this skill. They also practice such use of data in a combination of logical reasoning in their group presentation and final paper.
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Expected Learning Outcome 1.4: Successful students are able to make and evaluate important assumptions in estimation, modeling, logical argumentation, and/or data analysis. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met. (50-700 words)

In quizzes $11,16,18,19$, and 20 and their corresponding reading material, students examine the impact of stated or unstated assumptions in various models of rationality. For example, they evaluate the aptness of simplifying assumptions such as two-person versus three-person (more than two-person) interactions in game theoretic models and the limitations of models that assume the former. They also compare the results of one-shot versus repeated interactions and many other seemingly benign but impactful assumptions that are common in formal models of rationality. The "critical response" assignments evaluate students' ability in identifying such assumptions and their aptness for their goals. Students are asked to write a one-page critical response to their classmates' group presentations. In this critical response, they are asked to identify all the background assumptions of the presented models and the unstated premises of the arguments. They are also required to anticipate the actual and potential limitations of such assumptions and premises.

Expected Learning Outcome 1.5: Successful students are able to evaluate social and ethical implications in mathematical and quantitative reasoning. Please link this ELO to the course goals and topics and indicate specific activities/assignments through which it will be met. (50-700 words)

The normative nature of any theory of rationality and its historical and social influence is at the forefront of this course. After the general introduction to rational choice theories, from week 2 to week 6, students read about various critiques of rationality and the impact of mathematic and quantitative formulations of these theories. For instance, they read about the feminist concerns about how depiction of individuals as rational, self-interested, utility maximizers has generated models that miss important aspects about human interactions and needs (quizzes 1 and 6). Students also learn about the positive use of mathematical and quantitative reasoning in discussions about justice (week 6-quiz 10), intersectionality (week 8- quiz 14), problematic norms (week 9, quiz 17), and theories of democracy (week 11, quiz 19).


[^0]:    - Course changes for SU23 should have reached the Registrar's Office by January 1. So I suggest changing the effective term to AU23. (by Vankeerbergen,Bernadette Chantal on 01/31/2023 09:55 AM)

