PHIL 4911/5901: Causation and Explanation

Fall 2016 (Class #11913/11914), Wednesdays 1:00-4:00pm, Ellis Hall 215

BASIC INFORMATION

Instructor Dr. Yoichi Ishida (pronounced "yo-EE-chee ee-SHEE-da")

Email: ishiday@ohio.edu Mailbox: Ellis Hall 202

Instructor website: www.yoichiishida.com

Office & Ellis Hall 220H

Office Hours Mondays and Wednesdays 4–5pm and by appointment

Blackboard: https://blackboard.ohio.edu Course

Website

Turnitin: http://turnitin.com/ (Login information will be provided later.)

COURSE DESCRIPTION

Topic of the This course explores the relationship between causality and explanation. It provides a critical survey of major theories of causation and explanation, and discusses varieties of causal explanation. We will also discuss the proposal that some explanations, such as mathematical explanations, are non-causal. Examples will be drawn from everyday life as well as natural and social sciences, particularly causal models and mathematical models.

Learning Outcomes

Upon completion of this course, the students will be able to:

- 1. Explain important theoretical and empirical problems and disputes regarding the course topic.
- 2. Explain major theories and models in the literature on the course topic.
- 3. Think critically about and discuss the problems as well as the proposed theories and models.

Prerequisites 3 courses in philosophy

Disclaimer Although the learning outcomes are designed to be suitable for an upper-division undergraduate and a graduate course, students may still vary in their competency and performance levels on these learning outcomes. They can expect to achieve these outcomes only if they honor all course policies, attend and participate in classes regularly, and complete all assigned work in good faith and on time.

TEXTBOOKS

You must have your personal copy of the required book listed below as well as other required readings to be posted on Blackboard. You must bring your copies of a week's required readings to class.

Wesley C. Salmon. Scientific Explanation and the Causal Structure of the World. Princeton University Press, 1984. ISBN-10: 0691101701.

ASSESSMENT OF STUDENT LEARNING

The assignments listed below are required in this course and count toward your final grade as described in this section. Note that there are two different sets of assignments, one for undergraduate students and the other for graduate students.

ASSIGNMENTS (Undergraduate)

Discussion	By 3pm on Tuesday each week, you will post on Blackboard one question about	
Questions	the week's reading that you would like to discuss in the seminar on Wednesday.	
	Your question will be viewed by other people in class.	

Contribution You are to contribute to the discussion in each seminar meeting by asking to Discussion questions or making comments that are relevant to the topic at hand. In addition, you are expected to answer other students' discussion questions posted on Blackboard. Your contribution to online discussion will be monitored periodically.

There will be two essays (1500–2000 words each) on the topics to be provided. Each essay is worth 20% of the final grade. Both essays must be turned in to turnitin.com by the due dates.

The final exam will be comprehensive. It is closed book and given on the date Final Exam and time officially scheduled by the university.

FINAL GRADE (Undergraduate)

In summary, the available points for the assignments are distributed as follows:

Assignments	Weight (%)
Discussion Questions & Contribution to	30
Discussion	
Essays	40
Final Exam	30
Total	100 %

You will receive a final letter grade according to the following grading scale. Although not formalized in the table above, your improvements over the course of the semester and exceptionally good participation in class will count favorably toward your final grade.

Grade	Percentage	Grade	Percentage
A	93 or above	С	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
В	83-96	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	59 or below

ASSIGNMENTS (Graduate)

Discussion By 3pm on Tuesday each week, you post on Blackboard three (3) questions about Questions the week's reading that you would like to discuss in the seminar on Wednesday. Your questions will be viewed by other people in class.

Contribution to Discussion

You are to contribute to the discussion by asking questions or making comments that are relevant to the topic at hand. The quality of your contribution is important: you should aim to keep the discussion to the point and constructive. In addition, you are expected to answer other students' discussion questions posted on Blackboard. Your contribution to online discussion will be monitored periodically.

Seminar Presentation

Each student will present his or her work-in-progress term paper. You are expected to schedule a presentation by Week 9, and presentations start in Week 10. Your presentation should be about 20 minutes followed by a 30-min discussion.

If there is an important background reading (e.g., a paper you criticize), you can nominate it as an assigned reading for the week of your presentation. You must contact me at least a week in advance to make this arrangement.

This is a work-in-progress talk, so you don't have to be able to present your argument in full. Rather, you should describe as clearly as you can your paper's aim and scope as well as your working thesis and argument.

Term Paper

A term paper (approx. 4000-5000 words) is due at the end of the term. By Week 5, each graduate student must see me to discuss potential paper topics. See the attached instructions.

FINAL GRADE (Graduate)

In summary, the available points for the assignments are distributed as follows:

Assignments	Weight (%)
Discussion Questions & Contribution to Discussion	30
Seminar Presentation	30
Term Paper	40
Total	100

You will receive a final letter grade according to the grading scale given above for undergraduate students.

You can expect to get an A only if you meet the course requirements and expectations in an exemplary manner and you demonstrate that you have attained the learning outcomes at a sophisticated level.

COURSE POLICIES

All students in this course are expected to comply with the following policies.

Academic Academic integrity and honesty are basic values of Ohio University. Students are Integrity expected to follow standards of academic integrity and honesty. Academic misconduct is a violation of the Ohio University Student Code of Conduct subject to a maximum sanction of disciplinary suspension or expulsion as well as a grade penalty in the course.

> You are expected to be familiar with the information on academic integrity provided at http://www.ohio.edu/communitystandards/academic/students.cfm.

Electronic You may use laptops to take notes during class, but you may not use any electronic devises, such as cellphones, tablets, and laptops, while you are doing graded assignments in class (e.g., exercises, exams).

Turnitin

Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of Turnitin.com page service is subject to the Usage Policy and Privacy Pledge posted on the Turnitin.com site.

Attendance Attendance is required.

Classroom You are expected to behave in a civil manner, carefully listen to whoever is talking

Incivility

at a moment, and respect other people in class. I will not tolerate behaviors that are harmful to the learning of other students, such as disrupting other people's speech, mocking or insulting other people, and showing general disrespect and poor manners toward other people in class.

Disputes

Grade If you believe that a grade on any specific assignment was in error, or unfair, you should resubmit that assignment, along with a brief cover note detailing those prima facie errors, or disagreement, together with appropriate evidence. The same procedure should be followed regarding the final grade. A request for regrading or re-assessment is just that: the revised grade may increase, remain unchanged, or decrease. An explanation will be provided to the student in any case. Note that this policy does not apply to grade calculation errors, which should be brought to my attention right away.

Missed Assignments & Exams

Late or Essays: A late essay will be accepted but penalized at the rate of 4 percentage points for each day (including weekends) the essay is late.

> *Exams*: A makeup for the midterm exam can be arranged only in exceptional circumstances (see below). If you are scheduled for more than three final exams in one day, you may seek relief from the instructor with the examination scheduled *latest* in the day. For more on this procedure, see https://www.ohio.edu/registrar/finals.cfm.

Seminar Presentations: You are not to miss your presentation for any reason other than exceptional circumstances outlined below.

Exceptional circumstances: The following are generally considered exceptional circumstances: a medical emergency, the death of a near relative, and a university-related trip (e.g., athletic team commitments). If you are in these circumstances, (i) obtain written documentation from a relevant authority (e.g., doctor, coach, etc.) verifying that you are/were in one of these circumstances, (ii) contact me as soon as you can to set up an appointment, and (iii) show me the documentation. I will then decide how to apply the policy on late or missed assignments and exams to your circumstance, and I will make, by mutual agreement, any necessary makeup assignments or other arrangements.

UNIVERSITY RESOURCES FOR LEARNING

Your success in this course is important to me. I recognize that there are multiple ways to learn and that this multiplicity should be acknowledged in the structure of university courses and the evaluation of their participants. Thus, I encourage you to discuss your learning styles and comprehension requirements with me during my office hours or at another arranged time, if necessary. Every student is entitled to a meaningful and stimulating learning experience, and you are strongly encouraged to use the services provided by the Academic Advancement Center and the Student Writing Center. Disabled students are also strongly encouraged to use the services

provided by Student Accessibility Services, including the provision of note-takers, transcribers, and sign-language interpreters.

Accessibility Services

Student Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs and provide written documentation from Student Accessibility Services. If you are not yet registered as a student with a disability, please contact Student Accessibility Services at 740-593-2620 or visit the office in 348 Baker University Center.

Advancement Center

Academic You can discuss any academic matters at the Academic Advancement Center, Alden Library 101, 740-593-2644 (http://www.ohio.edu/aac/index.cfm).

Student Clear and well-organized writing is absolutely necessary for getting a good grade Writing on the essays in this course. While you work on your essays, you should consider Center visiting the Student Writing Center in Alden Library (2nd floor), 740-593-2646. You can schedule an appointment online at http://www.ohio.edu/writing/.

COURSE SCHEDULE

The following is a *tentative* schedule of topics, reading, assignments, and their due dates. Supplementary readings may be assigned. Expect that this schedule and the assigned readings will be modified throughout the term to meet the students' interests and progress. You are expected to have done the assigned reading before the first class each week.

Wk	Date	Topic	Readings (* = on Blackboard)		
1	Aug 24	Introduction	Lipton *, "Causation and Explanation"; Salmon *, <i>Four Decades of Scientific Explanation</i> , Introduction.		
2	Aug 31	Deductive-Nomological Model of Explanation	Hempel* , "Aspects of Scientific Explanation," Sec. 1–2; Salmon* , <i>Four Decades</i> , 1.1 and 2.3.		
3	Sept 7	Inductive-Statistical Model; Three Conceptions of Scientific Explanation	Hempel*, "Aspects," Sec. 3–3.4.2; Salmon*, Four Decades, 2.5; Salmon, Scientific Explanation and the Causal Structure of the World, Ch. 1		
4	Sept 14	Statistical Explanation	Salmon, Ch. 2; Humphreys*, "Aleatory Explanations"		
Graduate: By week 5, the graduate students must discuss term paper topics with the instructor.					
5	Sept 21	Objective Homogeneity	Salmon, Ch. 3		
6	Sept 28	Three Conceptions Revisited	Salmon , Ch. 4; Woodward* , "The Causal Mechanical Model of Explanation"		
7	Oct 5	Causal Connections	Salmon, Ch. 5		
Unde	Undergraduate: Essay 1 due by 11:59pm on October 9.				
8	Oct 12	Causal Forks and Common Causes	Salmon, Ch. 6; Dowe*, "Wesley Salmon's Process Theory of Causality and the Conserved Quantity Theory"		
Graduate: By week 9, the graduate students must schedule their seminar presentations.					
9	Oct 19	Probabilistic Causality	Salmon, Ch. 7; Eells*, Probabilistic Causality, Ch. 1		
10	Oct 26	Cont.	Eells* , Ch. 2; Ch. 6, Sec. 1, 2, and 6		
11	Nov 2	Theoretical Explanation	Salmon, Ch. 8		
12	Nov 9	Non-Causal Explanation	Nerlich*, "What Can Geometry Explain?"; Sober*, "Equilibrium Explanation"; Skow*, "Are There Non- Causal Explanation (of Particular Events)?"		
13	Nov 16	Mechanistic Explanation	TBA		
14	Nov 30	TBA	TBA		

Undergraduate: Essay 2 due by 11:59pm on December 4.

Final Exam: Friday, December 9, 10:10am-12:10pm. Graduate student term papers are due in class.

The above schedule, policies, procedures, and assignments in this course are subject to change in Disclaimer the event of extenuating circumstances, by mutual agreement, and/or to ensure better student learning.

The lectures, classroom activities, and all materials associated with this class and developed by the Copyright instructor are copyrighted in the name of Yoichi Ishida on this date August 22, 2016.

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Term Paper (Graduate)

Topic: By week 5, you should discuss your potential term paper topic with me.

Length: Your paper should be 4000–5000 words long, excluding footnotes and references.

References: Use a consistent in-text citation and reference style. Chicago is one of the standard styles in philosophy of science, and you can also follow a style of *Philosophy of Science* (http://journal.philsci.org/formatting-guidelines). Disregard the instructions for blinding.

Other policies: See the syllabus.

Some Expectations/Suggestions:

- 1. Your paper will be graded on quality as a philosophy paper: a good paper should be wellorganized and written clearly, and present a cogent argument(s) for a potentially important thesis (or theses) in a manner that another philosopher who has not read the relevant literature can easily follow.
- 2. Your paper need not advance a wholly original thesis, but it shouldn't just reiterate someone else's thesis or merely summarize various arguments offered in the relevant literature.
- 3. In other words, you should aim at making a modest but potentially important point, and argue for it thoroughly and cogently.
- 4. Related to (3), it's a good idea to consider a serious objection to your thesis or argument, and respond to it.
- 5. If you are going to criticize someone else's view, it's better to carefully develop one or two serious criticisms rather than sketch many. Choose what you think is the most serious criticism rather than list a whole bunch of criticisms, some of which may well be minor and detract the reader from important points.