

Logic and Reasoning: Syllabus

Philosophy 130

TR 8:30-9:50

Fall 2019

Professor:

Michael O'Rourke, S. Kedzie 524A, (517) 432-0751, orourk51@msu.edu

Office hours: 10:00-11:00 T and R, or by appointment

Classroom:

We will meet in 108 Kresge Art Center.

Texts and Materials:

There is one required text and one required classroom management system for the class:

- The Text: *Understanding Arguments*, 9th edition, by Walter Sinnott-Armstrong and Robert Fogelin (Belmont, CA: Cengage, 2014). It should be available through the bookstore; if you purchase it elsewhere, please be sure you have the 9th edition. Also, please be sure ***not*** to buy the "Concise Edition".
- Classroom Management System: Top Hat. At this point, you should have received a message inviting you to subscribe to Top Hat; if you haven't seen this, please check your junk mail. Joining Top Hat for this class should set you back \$30. (There are other costs if you are using it in more than one class.) This is a required expense – we will use this system every day in class. Your attendance grade and scores on various in-class activities will be computed using this system.

I will supplement these resources with online resources that will elaborate and extend topics treated in class. You will be held responsible for the online material. The lectures, handouts, and homework assignments will be available on D2L.

Reasoning Logically, Thinking Critically

I will teach this section of "Logic and Reasoning" as a course in critical thinking. A course in critical thinking is a course in self-improvement. It is a chance to look inside yourself and examine your own ability to think. It is a place where you can learn about the difference between good thinking and bad thinking. It is an opportunity to acquire reasoning skills that should serve you well in whatever pursuit you engage in after this semester.

Chances are, you haven't thought too much about thinking in the past. How does one go about it? One way is to close your eyes (the tighter the better), purse your lips, and concentrate really hard on what's going on inside your head. This method doesn't yield much in the way of insight, however. Another method is to look for the nature of thinking in a more objective and public place, for example, in the language that we use. Much of our intellectual development over the past couple of centuries is predicated on the realization that we can examine thought by attending to language *because* the structure of thought is mirrored in language. Thus, by studying the structure and meaning of language, we should be able to identify the structure and content of thought—the analysis of language and its use reveals the dynamic power of thought.

Given this, you shouldn't be too surprised to learn that we will spend a significant amount of time talking about language. We begin by investigating language as we find it, and then we focus on the use of language in arguments. It is in arguments that we exploit relationships between thoughts and work toward the discovery of new thoughts. When we make an argument, we string thoughts together, relying on their structure to underwrite the quality of the reasoning. Thus, the nature of argument is grounded in the structure of thought, and since the structure of thought is revealed in the structure of language, investigation of the structure of language can ground an understanding of argument. We will do this informally through analysis of pieces we find in newspapers and commercials we see on television (to name two), as well as somewhat more formally through the study of the logical character of the language we use.

At this point, you might be wondering why we put so much emphasis on argument; after all, there is quite a lot of thinking we do that does not involve argument. Creative thinking, for example, as well as certain types of problem solving. If we are interested in learning about thinking, shouldn't we also attend to these modes? I grant this point, but we need to remember that this is a course in *critical* thinking. In the sense intended, "critical" does not mean only criticism; rather, it implies care and precision in all forms of evaluation and judgment. This suggests two responses to the concern. First, creative thinking and problem solving involve evaluation and judgment, and care and precision will be rewarded there just as elsewhere; thus, those modes of thinking will also embed critical reasoning of the sort we study in here. Second, consider that we evaluate and make judgments in the process of learning about things, i.e., acquiring *knowledge*. This is true whether you are learning in school, in conversation with friends, or in mind-melding with the television. If you *know* about a topic, then you have beliefs about it that you can justify, and this justification can always be cast in the form of a claim supported by reasons. This, however, is simply an *argument*. Thus, our attempts to understand ourselves and the world around us and articulate that in various ways will be successful only if they enable us to argue for the things they reveal.

A final point deserves mention. In this class, we will study argument skills in the abstract, at a remove from the specific subject matters that you study in other courses. While many critical thinking skills are subject specific, there are forms of reasoning and other facts about good thinking that pervade all subject matters. We will focus primarily on these general skills in this course, although we will frequently use concrete examples to illustrate these argument skills.

Goals & Objectives:

As a Michigan State student, you are part of an educational institution that has certain, well-defined

learning goals and objectives. You have a right to expect that these goals and objectives will guide your instructors as they design their courses. Just as a reminder, here are the Michigan State University learning goals and outcomes (from <http://learninggoals.undergrad.msu.edu/>):

Analytical Thinking (AT)

The MSU graduate uses ways of knowing from mathematics, natural sciences, social sciences, humanities, and arts to access information and critically analyzes complex material in order to evaluate evidence, construct reasoned arguments, and communicate inferences and conclusions.

- Acquires, analyzes, and evaluates information from multiple sources
- Synthesizes and applies the information within and across disciplines
- Identifies and applies, as appropriate, quantitative methods for defining and responding to problems
- Identifies the credibility, use, and misuse of scientific, humanistic and artistic methods

Cultural Understanding (CU)

The MSU graduate comprehends global and cultural diversity within historical, artistic, and societal contexts.

- Reflects on experiences with diversity to demonstrate knowledge and sensitivity
- Demonstrates awareness of how diversity emerges within and across cultures

Effective Citizenship (ECit)

The MSU graduate participates as a member of local, national, and global communities and has the capacity to lead in an increasingly interdependent world.

- Understands the structures of local, national, and global governance systems and acts effectively within those structures in both individual and collaborative ways
- Applies knowledge and abilities to solve societal problems in ethical ways

Effective Communication (ECom)

The MSU graduate uses a variety of media to communicate effectively with diverse audiences.

- Identifies how contexts affect communication strategies and practices
- Engages in effective communication practices in a variety of situations and with a variety of media

Integrated Reasoning (IR)

The MSU graduate integrates discipline-based knowledge to make informed

decisions that reflect humane social, ethical, and aesthetic values.

- Critically applies liberal arts knowledge in disciplinary contexts and disciplinary knowledge in liberal arts contexts
- Uses a variety of inquiry strategies incorporating multiple views to make value judgments, solve problems, answer questions, and generate new understandings

This course is related most closely with the first and last of these goals and outcomes, although the other three are by no means irrelevant to the work we'll do in here. Our primary goal in this class, though, is to help you learn how to think more clearly. This is the information age, and we are inundated with information of varying quality. To survive and thrive in this age, one must be a discerning consumer of information, and this requires that we think clearly about what we believe and what we are asked to believe. By semester's end, you should be able to:

- Identify and reconstruct arguments in columns, editorials, science articles, etc. (AT, CU, ECit, IR)
- Distinguish between deductive and non-deductive argumentation (AT)
- Identify and evaluate specific types of deductive and non-deductive arguments (AT)
- Identify a wide range of fallacies in argumentative discourse (AT)
- Distinguish between different forms of bias (AT, CU, ECit, ECom, IR)
- Spot and evaluate non-argumentative attempts at persuasion (AT, IR)
- Critically evaluate arguments that you encounter (AT, CU, ECit, IR)
- Construct good arguments for claims you support (AT, CU, ECit, ECom, IR)
- Express in writing argument reconstruction and evaluation (AT, ECom)

Course Structure:

There will be some lecture in this course, but I hope to create an active learning environment in the classroom. Top Hat will be a key part of our strategy here. Occasionally, days will be devoted to study sessions on the problem sets or in advance of the exams. Two class periods will be devoted to an in-class group writing assignment. *Remember:* you are paying for this educational opportunity, so keep me honest. Ask questions, issue challenges, make corrections, and do what you need to do to get the most out of it.

Requirements:

Attendance. Attendance is required in this class, and is worth 100 points of the final point total. You

will be permitted two unexcused absences, but after that, every unexcused absence will result in a decrement of 10 points from the 100-point attendance allocation. I will record this with Top Hat.

Quizzes. There will be a number of short quizzes given in class over the course of the semester. If you have done your reading and you are paying attention in class, the quizzes should give you no trouble. You will use Top Hat for these.

Assignments. There will be 6 homework assignments. The first will be worth 20 points and all subsequent assignments 100 points apiece. One assignment will be a group paper and the rest will be devoted to working through exercises found in the text. In calculating your final grade, the lowest grade received on assignments 2 through 6 will be dropped.

- *Assignment #1:* The first homework assignment is due by 5:00 p.m. on Friday, September 6. Please send me an e-mail message at orourk51@msu.edu in which you answer the following questions:
 1. What are you majoring in?
 2. Why did you decide to enroll in this class?
 3. What do you hope to get from the class?

Please send these from the email account you use most often, and put “PHL 130” in the subject line. Please write your full name in the body of the message. Each message received that conforms to these requirements will earn its author 20 points—points don’t come any easier than this. You’ll receive a brief reply to this message, indicating that it was received.

- *Group Paper Exercise (#2):* One short (600 word) group paper will be prepared in class during the second full week of class. Most of the work for this paper will be completed in class, including the writing, which will be done collectively in groups. The group paper will occupy two class sessions, a reflection/analysis session and an outlining/writing session. More detail will be supplied about this assignment soon, but for now here is a description:
 1. Groups of 5 students, arranged in advance, will come together in the first class session to discuss and analyze their topic. Each of you will write up individual notes about your group’s discussion and have them initialed at the end of the first session.
 2. Between class periods, you will write up a few thoughts about the topic to bring with you to the second class session. These are thoughts that should help your group write up a collective report in the second session.
 3. In the second session, you will share your written thoughts with your group, brainstorm a paper outline (if you haven’t already done so), and then spend the bulk of the period writing up a collective report of your group’s analysis on paper that you are provided. When class ends, you will submit your group report, which should be no more than 600 words in length.

- *Problem Sets (#3, #4, #5, #6)*: These will be primarily exercises from the book. I will distribute the assigned exercises in the next week or so. The due dates for the assignments are listed below. (These are subject to change, should the need arise.) I will grade only a select few of the exercises, and you will not know in advance which ones those will be. If an exercise appears on a homework, it is fair game for the exam even if it isn't one that I grade—I will not put a problem on the exam if something like it has not appeared in a problem set.

You are encouraged to discuss these assignments with each other, but you must write them up on your own. If you work with others, please list their names on the front of your paper.

Examinations. There will be a midterm examination and a final examination. The final will not be comprehensive. Each examination will be worth 150 points. The midterm will be administered in class on October 29; the final exam will be Tuesday, December 10, 7:45 – 9:45 am in this room.

Grading:

The exams and cumulative homework scores will be curved, if the scores require it. In calculating the final semester grade, I will begin by considering the grade cutoffs at 90% (4.0), 85% (3.5), 80% (3.0), 75% (2.5), 70% (2.0), 65% (1.5), and 60% (1.0), respectively. If need be, I will curve the cutoffs downward, but I will not raise them above those levels.

The point totals are as follows:

<u>Attendance</u>	100
<u>Quizzes</u>	100
<u>Assignment #1 – Email</u>	20
<u>Assignments #2 – #6</u>	400
<u>Midterm Examination</u>	150
<u>Final Examination</u>	<u>150</u>
	920

Land Acknowledgment:

We collectively acknowledge that Michigan State University occupies the ancestral, traditional, and contemporary Lands of the Anishinaabeg – Three Fires Confederacy of Ojibwe, Odawa, and Potawatomi peoples. In particular, the University resides on Land ceded in the 1819 Treaty of Saginaw. We recognize, support, and advocate for the sovereignty of Michigan’s twelve federally-recognized Indian nations, for historic Indigenous communities in Michigan, for Indigenous individuals and communities who live here now, and for those who were forcibly removed from their Homelands. By offering this Land Acknowledgement, we affirm Indigenous sovereignty and will work to hold Michigan State University more accountable to the needs of American Indian and Indigenous peoples.

Policies:

Attendance

Attendance is required in this class. Excused absences are those excused by the university for official activities, those excused by me in advance, or those excused subsequently for documented reasons (e.g., health problem, family emergency). When you attend class, please be respectful of the others in the room—turn all sounds off on your phones, don't engage in noisy side conversations, etc.

Academic Honesty

Article 2.III.B.2 of [Student Rights and Responsibilities](#) states, “The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards.” In addition, the Department of Philosophy adheres to the policies on academic honesty as specified in General Student Regulations 1.0, *Protection of Scholarship and Grades*; the all-University Policy on *Integrity of Scholarship and Grades*; and Ordinance 17.00, Examinations. (See [Spartan Life: Student Handbook and Resource Guide](#) or the MSU Web site: www.msu.edu.) You are expected to complete all course assignments without assistance from any source that I have not authorized. You are expected to develop original work for this course; therefore, you may not submit course work you completed for another course to satisfy the requirements for this course, and you may not pass off the work of others as your own (i.e., plagiarize). Also, you are not authorized to use the <http://www.allmsu.com> Web site to complete any course work in Philosophy 130. Students who violate MSU academic integrity rules may receive a penalty grade, including a failing grade on the assignment or in the course. If you are unsure about the appropriateness of your course work, please contact me. (See also <https://www.msu.edu/unit/ombud/academic-integrity/student-faq.html>.)

Limits to Confidentiality

Materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors, may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues based on external legal obligations or that relate to the health and safety of MSU community members and others. As an instructor, I am a [mandatory reporter](#) – I must report the following information to other University offices if you share it with me in material submitted or a conversation:

- Suspected child abuse/neglect, even if this maltreatment happened when you were a child
- Allegations of sexual assault or sexual harassment when they involve MSU students, faculty, or staff, and
- Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In almost all cases, it will be your decision whether you wish to speak with that individual.

If you would like to talk about these events in a more confidential setting you are encouraged to make an appointment with the MSU Counseling Center.

MSU Counseling Center: 517-355-8270

24 Hour Sexual Assault Crisis Line: 517-372-6666

Counseling Center Sexual Assault Program: 517-355-3551;
<http://www.endrape.msu.edu/>

MSU Safe Place: 517-355-1100; <http://safeplace.msu.edu/>

Deadlines

All assignments must be handed in as you arrive at the beginning of class on the day they are due. I do not accept late work unless class was missed for a documented emergency that arose without time for you to submit your work in advance. If you know that you will miss a class session prior to that session, you will need to submit your assignment in advance.

Incompletes

The MSU policy for incompletes is as follows:

The I-Incomplete may be given only when: the student (a) has completed at least 6/7 of the term of instruction, but is unable to complete the class work and/or take the final examination because of illness or other compelling reason; and (b) has done satisfactory work in the course; and (c) in the instructor's judgment can complete the required work without repeating the course.

I do not give out incompletes unless the "compelling reason" mentioned above is documented, and you must discuss this with me in advance of finals week.

Accommodations for Students with Disabilities (from the Resource Center for Persons with Disabilities (RCPD))

Michigan State University is committed to providing equal opportunity for participation in all programs, services, and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at <http://rcpd.msu.edu/>. It is your responsibility to promptly register with RCPD because some arrangements must be done well in advance (e.g. alternative test taking place or time). Once your eligibility for an accommodation has been determined, you will be issued a verified individual services accommodation ("VISA") form. Please present this form to me at the start of the term and/or two

weeks prior to the accommodation date (e.g., paper due date). Requests received after this date will be honored whenever possible.

Tentative Schedule

8/29	Syllabus & Introduction	
9/3, 9/5	Chapters 3, 4, 5	pp. 59-90, 96-110
9/10, 9/19	Chapter 1 & 2	pp. 1-49
9/24, 9/26, 10/1	Chapter 2 & 3	pp. 17-39, 41-78
10/8, 10/10	Chapters 3 & 5	pp. 41-78, 90-96
10/15, 10/17, 10/22, 10/24, 10/31, 11/5	Chapters 13-17	pp. 275-349
11/7, 11/12, 11/14	Chapter 6	pp. 113-150
11/19, 11/21, 11/26	Chapters 8-10	pp. 179-238
12/3, 12/5	Bias Module	Online resources

Important Dates:

<u>Date</u>	<u>No.</u>	<u>Assignment</u>
September 6	1	Email due
September 10, 12	2	Group paper exercise – Paper due on 9/12 in class
September 17		CLASS CANCELLED
October 8	3	Problem Set #1 due
October 22	4	Problem Set #2 due
October 29		<i>Midterm Examination</i>
November 21	5	Problem Set #3 due
November 28		NO CLASS – THANKSGIVING HOLIDAY
December 3	6	Problem set #4 due
December 10		<i>Final Examination, 7:45 – 9:45 am, 108 Kresge Art Center</i>