

Sample Syllabus: Critical Thinking

Instructor

Name: David Mokriski

Email: dmokriski@gmail.com

Office: South Hall 5719

Hours: Friday, 1:00 PM to 3:00 PM

I am also available by appointment. Please give me at least 24 hours' notice.

Course Description

This course is an introduction to basic reasoning skills, using both formal and informal methods and covering both deductive and inductive reasoning. We will learn, among other things, how to identify, classify, and evaluate arguments, how to avoid common pitfalls of reasoning and argumentation, and how to determine and prove when arguments or sets of statements have certain logical features, such as validity, consistency, and equivalence. We will begin with informal methods of assessing arguments, and later develop more rigorous techniques in a symbolic notation, which captures the logical structure of a good deal of ordinary (deductive) reasoning. Finally, we will end by covering various forms of inductive reasoning, including analogical arguments, causal arguments, and inference to the best explanation.

Required Text

Our textbook, *Logic: Concise Edition* (3rd Edition), is available at the UCSB Bookstore.

Baronett, S., *Logic: Concise Edition* (3rd Edition), Oxford University Press, New York, 2016.

Our plan is to work through (most of) chapters 1, 4, 7, 10, and 14. These chapters cover, respectively, an introduction to argumentation, informal fallacies, propositional logic, analogical arguments, and scientific reasoning.

Course Requirements

Here is the grading breakdown with tentative dates:

Nine weekly homework assignments – 18% (2% each) – Due Mondays

Section participation – 2% – See TA for details

First midterm exam – 20% – Monday February 5th, in class

Second midterm exam – 25% – Monday February 26th, in class

Final exam (cumulative) – 35% – Friday March 23rd, 12:00-3:00 pm

You may work together on homework problems, but be comfortable solving them on your own. The weekly homework assignments will be problems from the textbook (check Gauchospace for the list of homework problems each week, and for answers to the homework problems of previous weeks). Each homework will receive either full credit (for completion), half credit, or zero credit. Some exam problems are adapted from the textbook's online resource.

Schedule

We will try, as far as possible, to keep to the following tentative schedule:

<u>Week</u>	<u>Topics</u>	<u>Reading</u>	<u>Assignments</u>
<i>Unit 1: Basics of Argumentation</i>			
1	Intro to Argumentation	Chap. 1-1.E	HW1: Identifying Arguments
2	Evaluating Arguments	Chap. 1.F-1.H	HW2: Evaluating Arguments
3	Informal Fallacies	Chap. 4-4.E	HW3: Recognizing Fallacies
<i>Unit 2: Deduction</i>			
4	Intro to Propositional Logic	Chap. 7.A-7.B	First Midterm Exam: Monday 2/5 HW4: Translating Sentences
5	Truth Functions	Chap. 7.C-7.D	HW5: Calculating Truth-Values
6	Truth Tables	Chap. 7.E-7.G	HW6: Constructing Truth-Tables
<i>Unit 3: Induction</i>			
7	Analogical Arguments	Chap. 10.A-C	Second Midterm Exam: Monday 2/26 HW7: Evaluating Analogical Args.
8	Causal Arguments	Chap. 14.A-14.D	HW8: Evaluating Causal Args.
9	Scientific Reasoning	Chap. 14.E-14.H	HW9: Evaluating Scientific Args.
10	Catch-up and Review		Final Exam: Friday 3/23 from 12-3 pm

Disability Policy

If you need accommodations, please speak to me in advance and make arrangements with Disabled Students Services (DSP) at <http://dsp.sa.ucsb.edu>.

Academic Integrity

Academic dishonesty, such as cheating on exams, will be severely punished. For more info on what constitutes academic dishonesty, see judicialaffairs.sa.ucsb.edu/AcademicIntegrity.aspx.

Final Note

Please feel free to bring any concerns about the course to my attention. This syllabus is liable to change, and you are responsible for any changes given adequate notice. If you miss a class, it is your responsibility to find out what you missed.