

Syllabus<sup>1</sup>  
Logic (PHIL 2311-001)  
The University of Texas at Arlington (UTA)  
24 August 2017

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COURSE BLOG: <http://kbjcourseblog.blogspot.com/> (I do not use Blackboard.)

OFFICE HOURS: 11:00 to 12:00, TTh<sup>2</sup>

MEETINGS: 8:00 to 9:20, TTh, 207 Preston Hall (PH)

COURSE DESCRIPTION: Logic is the science of valid inference. Inference (also known as reasoning) is the process by which a conclusion is drawn from one or more premises. Some inferences are valid and some are not. *Valid* inferences are those that are truth-preserving. If I infer ‘Somebody squared the circle’ from ‘Thomas Hobbes squared the circle’, I infer (i.e., reason) validly, even though the premise is false. (Hobbes did not square the circle.) What makes an inference valid is not the *truth* of its premises but the *relation* between its premises and its conclusion. The aim of this course is to develop techniques for distinguishing between valid and invalid inferences. We will do this for two types of logic:

- propositional (the logic of propositions); and
- predicate (the logic of predicates).

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<sup>1</sup> A syllabus is “the program or outline of a course of study, teaching, etc.” *The Oxford American Dictionary and Language Guide* (1999).

<sup>2</sup> If you can’t visit during office hours, don’t worry. We can communicate by e-mail. Anything that can be said in my office, face to face, can be said by e-mail, which has the added benefit of being a written medium. (Writing tends to be more thoughtful than speech, and it doesn’t require synchronization of schedules.)

Here are examples of each type:

	<b>Valid Inference</b>	<b>Invalid Inference</b>
<b>Propositional Logic</b>	If birds swim, then fish fly. Birds swim. $\therefore$ Fish fly.  (This inference is valid even though its second premise is false.)	If birds fly, then fish swim. Fish swim. $\therefore$ Birds fly.  (This inference is invalid even though its premises are true.)
<b>Predicate Logic</b>	Everything is gray. $\therefore$ The sun is gray.  (This inference is valid even though its premise is false.)	Not everything is red. $\therefore$ Nothing is red.  (This inference is invalid even though its premise is true.)

There are no prerequisites for the course. Students who wish to study informal logic or “critical thinking” should take Fundamentals of Reasoning (PHIL 1301). The two courses may be taken in any order.

READINGS: There is no textbook. All course materials are available free of charge (except for the paper on which to print them) from the UTA library (online) or from the course blog, which is accessible from any Internet-connected computer. Each student is responsible for locating and printing these materials. (See the document entitled “Course Outline” for details; it is incorporated herein by reference.) Bring the course materials to class with you, just as you would a textbook.

EXAMINATIONS: There are three course requirements:

1. An in-class examination consisting of 10 true-false exercises (one point each) and 30 multiple-choice exercises (three points each), which constitutes one third of your grade. This examination will be given during class on Tuesday, 26 September.
2. A noncomprehensive in-class examination consisting of 10 true-false

exercises (one point each) and 30 multiple-choice exercises (three points each), which constitutes one third of your grade. This examination will be given during class on Tuesday, 31 October.

3. A noncomprehensive in-class examination consisting of 10 true-false exercises (one point each) and 30 multiple-choice exercises (three points each), which constitutes one third of your grade. This examination will be given between 8:00 and 9:15 AM on Tuesday, 12 December.

The purpose of the examinations is to test the breadth and depth of your knowledge and skill. You are responsible for all the readings, paper handouts (if any), blog posts, lectures, and discussions (yes, discussions). I do not duplicate lectures in my office or provide notes to students; nor do I allow audio or video recording of my lectures (unless required by law under the Americans with Disabilities Act). If you miss a class, your only recourse is to ask another student for assistance. I *strongly* recommend that you find (make) a study partner the first week of class and meet regularly with this partner during the semester to go over the course material. I do not give quizzes, assign homework, or permit extra credit.

ATTENDANCE POLICY: I do not take attendance. This does not mean that attendance is unimportant. It is *very* important. It will be difficult for any student to receive a grade of C or better (and virtually impossible to receive an A) without perfect or near-perfect attendance. I will see to it that some of the examination questions are drawn from my lectures rather than from course materials. My aim in doing this is to punish students who don't come to class. Be forewarned! (Incidentally, I write letters of recommendation only for students who have perfect or near-perfect attendance records. If you think you might ask me for a letter of recommendation one day, keep this in mind.)

GRADING PROCEDURE: The maximum score on each of the three examinations is 100. I will assign grades on the basis of a 10% scale, which means that a final score of 90 or higher is an A, anything in the 80's a B, and so forth.<sup>3</sup> Here is an example.

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<sup>3</sup> UTA describes a grade of A as "Excellent," a grade of B as "Good," a grade of C as "Fair," a grade of D as "Passing, Below Average," and a grade of F as "Failure." See the section entitled "Grades and Grading Policies" in the University Catalog.

Suppose a student receives scores of 82, 72, and 85 on the three examinations. Here is the calculation:

$$82 + 72 + 85 = 239$$

$$239 \div 3 = 79.6$$

This student would receive a C in the course.

STUDENT LEARNING OUTCOMES: Students who (1) read the course material carefully (preferably more than once), (2) attend all classes, (3) listen to the lectures attentively, (4) make good notes, (5) participate in classroom discussions, and (6) study properly (preferably with one or more other students) will be able to (i) define important logical terms, such as “argument,” “premise,” “conclusion,” “deduction,” “induction,” “validity,” “truth,” and “soundness”; (ii) use truth tables to classify propositions, compare propositions, and test arguments for validity (in propositional logic); (iii) construct and evaluate proofs in propositional logic; and (iv) construct and evaluate proofs in predicate logic.

#### WHAT FOLLOWS IS UNIVERSITY BOILERPLATE<sup>4</sup>

ATTENDANCE: At the University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator in student success. Each faculty member is free to develop his or her own methods of evaluating students’ academic performance, which includes establishing course-specific policies on attendance. However, while UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients “begin attendance in a course.” UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when

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<sup>4</sup> “Boilerplate” (a legal term) means “Language which is used commonly in documents having a definite meaning in the same context without variation; used to describe standard language in a legal document that is identical in instruments of a like nature.” *Black’s Law Dictionary*, 5<sup>th</sup> ed. (1979).

assigning a student a grade of F, faculty report the last date a student attended their class based on evidence such as a test, participation in a class project or presentation, or an engagement online via Blackboard. This date is reported to the Department of Education for federal financial aid recipients.

**DROP POLICY:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://www.uta.edu/aao/fao/>).

**DISABILITY ACCOMMODATIONS:** UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including The Americans with Disabilities Act (ADA), The Americans with Disabilities Amendments Act (ADAAA), and Section 504 of the Rehabilitation Act. All instructors at UT Arlington are required by law to provide “reasonable accommodations” to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the Office for Students with Disabilities (OSD). Only those students who have officially documented a need for an accommodation will have their request honored. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting: The Office for Students with Disabilities (OSD) ([www.uta.edu/disability](http://www.uta.edu/disability)) or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at ([www.uta.edu/disability](http://www.uta.edu/disability)). Counseling and Psychological Services (CAPS) ([www.uta.edu/caps/](http://www.uta.edu/caps/)) or calling 817-272-3671 is also

available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

**NON-DISCRIMINATION POLICY:** The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit ([uta.edu/eos](http://uta.edu/eos)).

**TITLE IX POLICY:** The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. For information regarding Title IX, visit ([www.uta.edu/titleIX](http://www.uta.edu/titleIX)) or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or [jmhood@uta.edu](mailto:jmhood@uta.edu).

**ACADEMIC INTEGRITY:** Students enrolled in all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code in their courses by

having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents' Rule 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University. Additional information is available at (<https://www.uta.edu/conduct/>).

ELECTRONIC COMMUNICATION: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at (<http://www.uta.edu/oit/cs/email/mavmail.php>).

CAMPUS CARRY: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit (<http://www.uta.edu/news/info/campus-carry/>).

STUDENT FEEDBACK SURVEY: At the end of each term, students enrolled in face-to-face and online classes categorized as "lecture," "seminar," or "laboratory" are directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback via the SFS database is aggregated with that of other students enrolled in the course. Students' anonymity will be protected to the extent that the law allows. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law and aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit

(<http://www.uta.edu/sfs>).

**FINAL REVIEW WEEK:** for semester-long courses, a period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

**EMERGENCY EXIT PROCEDURES:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

**STUDENT SUPPORT SERVICES:** UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to [resources@uta.edu](mailto:resources@uta.edu), or view the information at (<http://www.uta.edu/universitycollege/resources/index.php>).