## Introduction to Logic

## **Baylor University**

| MEETING  |   |   |
|----------|---|---|
| INFO     | Instructor: Alli Krile Thornton   | Philosophy 1306.04  |
|          | allisonthorn@gmail.com  | MWF 1:25-2:15   |
|          | 417.737.0200  | MH 106  |
| GRADING  | <ul> <li>45 Points 3 Exams <ul> <li>15 points per exam.</li> <li>Not cumulative.</li> <li>Exam dates are on the schedule below.</li> </ul> </li> <li>30 Points 3 Argument Analysis Assignments (AAAs) <ul> <li>10 points per assignment.</li> <li>We will go over how to complete these assignments in class.</li> <li>You get an automatic 0/100 if you plagiarize or turn in your assignment late.</li> </ul> </li> <li>25 Points 8 Unannounced Quizzes <ul> <li>5 questions each quiz; 1 point for each question; I drop your 3 lowest scores.</li> <li>Short answer questions covering that day's readings and/or last class.</li> <li>Given at the beginning of class, picked up 10 minutes later.</li> <li>You cannot make up a quiz for any reason, but I will drop your 3 lowest scores.</li> </ul> </li> <li>+/- Participation </li> </ul> |   |
|          | adjusted by up to 1% at the end of the term.  |   |
| POLICIES | Honor code: Each student is expected to read, a <u>honor code</u> .   | understand, and abide by the university's   |
|          | <b>Technology</b> : Cell phones, laptops, tablets, etc. r<br>during class. If you require accommodations that<br>me about it.   | nust be kept out of sight and out of use<br>at require such technology, please talk to      |
|          | Accommodations: If you have a condition that<br>in this course, you may be entitled to accommod<br>Access and Learning Accommodation.   | interferes with your ability to participate<br>lations. Please contact the <u>Office of</u> |
| TEXT     | <u>The Power of Logic</u> , 5th edition, by Frances Howar<br>Ryan Wasserman; ISBN: 0078038197   | d-Snyder, Daniel Howard-Snyder, and   |

## SCHEDULE

| Date | Subject                             | Reading      | Homework  |
|------|-------------------------------------|--------------|---|
| 8/22 | Introduction                        |              |   |
|      | Basic Co                            | ncepts and G | ood Arguments   |
| 8/24 | Validity/Soundness/Strength/Cogency | 1.1, 1.4     | <b>1.1</b> : A (5, 6, 24), B (1-30), C (1-4), D (3, 8)<br><b>1.4</b> : A (1-15), B (1-6, 9-12, 14-15), D (2, 3) |
| 8/26 | Validity/Soundness/Strength/Cogency |              |   |
| 8/29 | Forms and Validity                  | 1.2          | <b>1.2</b> : B (1-15)   |

| 8/31  | Forms and Validity                  |               |   |
|-------|-------------------------------------|---------------|---|
| 9/2   | Counterexamples and Invalidity      | 1.3           | <b>1.3:</b> A (1-15)                                    |
| 9/5   | NO CLASS (Labor Day)                |               |   |
| 9/7   | Counterexamples and Invalidity      |               |   |
| 9/9   | NO CLASS                            |               |   |
| 9/12  | Well-Crafted Arguments              | 2.2           | <b>2.2:</b> A (1-4, 14), B (1-4), C (6), D (2, 5, 6, 9) |
| 9/14  | Well-Crafted Arguments & AAAs info  |               |   |
|       |                                     | Categorical   | Logic   |
| 9/16  | Categorical Statements and the      | 5.1. 5.2. 5.3 | <b>5.1:</b> A (1-5), B (1-5)                            |
| - / - | Square of Opposition                | - , - ,       | <b>5.2:</b> A*, B*, D*                                  |
|       | Internet                            |               | <b>5.3:</b> A*. B*. C*. D*                              |
| 9/19  | Venn Diagrams                       | 6.1, 6.2      | <b>6.1:</b> A (1-5), C (1-3)                            |
|       |                                     | - ,           | <b>6.2:</b> A (1-5), B (1-5)                            |
| 9/21  | Venn Diagrams                       | 6.3, 6.5, 6.6 | <b>6.3:</b> A (1-5), B (1-10)                           |
| 9/23  | Venn Diagrams                       |               |   |
| 9/26  | Review                              |               | AAA #1 Due  |
| 9/28  | Review                              |               |   |
| 9/30  | Exam #1                             | Exam #1       | Exam #1   |
|       | State                               | ment Logic: 7 | Fruth Tables  |
| 10/3  | Symbols and Truth Tables            | 7.1, 7.2      | <b>7.1:</b> A (1-10), C (1-10)                          |
|       |                                     |               | <b>7.2:</b> A (1-10), B (1-5), C (1-10)                 |
| 10/5  | Symbols and Truth Tables            |               |   |
| 10/7  | Truth Tables for Arguments          | 7.3           | <b>7.3:</b> A (1-5), B (1-5), C (1-5)                   |
| 10/10 | Truth Tables for Arguments          |               |   |
| 10/12 | Abbreviated Truth Tables            | 7.4           | <b>7.4:</b> A (1-5), C (1-5), D (1-5), E (1-5)          |
| 10/14 | Abbreviated Truth Tables            |               |   |
| 10/17 | Abbreviated Truth Tables            |               |   |
| 10/19 | Logically Significant Relationships | 7.5           | <b>7.5:</b> A (1-5), B (1-5), C (1-5)                   |
| 10/21 | NO CLASS (Fall Break)               |               |   |
|       | St                                  | atement Logi  | ic: Proofs  |
| 10/24 | Implicational Rules                 | 8.1           | <b>8.1:</b> A (1-7), B (1-9), C (1-15), E (1, 4)        |
| 10/26 | Implicational Rules                 |               | AAA #2 Due  |
| 10/28 | Five Equivalence Rules              | 8.2           | 8.2: A (1-5), B (1-5), C (1-5), D (1-5)                 |
| 10/31 | Five Equivalence Rules              |               |   |
| 11/2  | Five More Equivalence Rules         | 8.3           | <b>8.3</b> : A (1-5), B (1-5), C (1-5), D (1-5)         |
| 11/4  | Conditional Proof                   | 8.4           | <b>8.4:</b> A (1-8), B (3)                              |
| 11/7  | Conditional Proof                   |               |   |
| 11/9  | Reductio ad Absurdum                | 8.5           | <b>8.5:</b> A (1-8)                                     |
| 11/11 | Reductio ad Absurdum                |               |   |
| 11/14 | Review (Truth Tables & Proofs)      |               |   |
| 11/16 | Exam #2                             | Exam #2       | Exam #2   |
|       |                                     | Ordinary Rea  | asoning   |

| 11/18 | Induction & Authority, Analogy, etc. | 10.1, 10.2 | <b>10.1:</b> A (1-10), B (1-10)  |
|-------|--------------------------------------|------------|----------------------------------|
|       |                                      |            | <b>10.2</b> : A (1-10), B (1-10) |
| 11/21 | Authority, Analogy, Enumeration      |            | AAA #3 Due                       |

| 11/23 | NO CLASS (Thanksgiving)            |               |                       |
|-------|------------------------------------|---------------|-----------------------|
| 11/25 | NO CLASS (Thanksgiving)            |               |                       |
| 11/28 | Probabilistic Fallacies            |               |                       |
| 11/30 | Probabilistic Fallacies            | tbd           | tbd                   |
| 12/2  | Irrelevance, Ambiguity, Assumption | 4.1, 4.2, 4.3 | <b>4.1</b> : A (1-10) |
|       |                                    |               | <b>4.2</b> : A (1-10) |
|       |                                    |               | <b>4.3</b> : A (1-10) |
| 12/5  | Review                             |               |                       |

12/13 FINAL EXAM (Exam #3) 9:00-11:00 am

\*Note that the syllabus is subject to change. You will always be given advance notice if readings will be added or subtracted or if there will be any alteration in due dates or assignments.\*