Phil 2200 Deductive Logic

Course Description

In this course, students will learn how to identify, construct, and evaluate arguments with an eye toward recognizing when an argument should be accepted, rejected, revised, or when more information is needed. The course will focus on deductive arguments. Because we will be dealing with deductive arguments, we will spend most of the class discussing different ways of determining whether an argument is valid. Among other skills they will develop, students will learn to do truth tables, Venn diagrams, and proofs of validity in both propositional and predicate logic.

Course Objectives

By the end of this course, you will be able to:

1. Identify arguments when they appear in speech or print.
2. Translate arguments from ordinary language into their logical form.
3. Evaluate arguments to determine whether they are valid or invalid.

Instructor

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Office: Old Main 002H
Office Hours: Fridays from 2:30-3:20 and by appointment on Zoom.

Course Resources

Textbook:

- Patrick J. Hurley. A Concise Introduction to Logic 12th Edition. This book is available on Canvas. Click "Bookshelf" in the menu on the lefthand side of the screen to access it.

Course Requirements
Each student will:

1. Complete homework assignments (10). (250 points, 25% of the course grade).
2. Take three exams. (250 points and 25% of the course grade each, for a total of 750 points and 75% of the course grade).

Grade Scheme

The following grading standards will be used in this class:

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<thead>
<tr>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A</td>
<td>100 % to 93.0%</td>
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<tr>
<td>A-</td>
<td>&lt; 93.0 % to 90.0%</td>
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<tr>
<td>B+</td>
<td>&lt; 90.0 % to 87.0%</td>
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<td>B</td>
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<tr>
<td>B-</td>
<td>&lt; 83.0 % to 80.0%</td>
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<tr>
<td>C+</td>
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<td>C-</td>
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<td>D+</td>
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<td>D</td>
<td>&lt; 67.0 % to 60.0%</td>
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<tr>
<td>F</td>
<td>&lt; 59.0 % to 0.0%</td>
</tr>
</tbody>
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Course Schedule/Outline

**Week One (August 31st-September 4th):** The Basics of Argument Evaluation Part One.

*Reading: A Concise Introduction to Logic Chapter One: Basic Concepts (pages 1-25)*

**Week Two (September 7th-September 11th):** The Basics of Argument Evaluation Part Two.

*Reading: A Concise Introduction to Logic Chapter One: Basic Concepts (pages 25-65)*

**Homework One Due (9/11)**

**Week Three (September 14th-September 18th):** Logic and Language and Introduction to Informal Fallacies.
Reading: A Concise Introduction to Logic Chapter Two: Language, Meaning, and Definition (pages 81-86).

A Concise Introduction to logic Chapter Three: Fallacies in General (pages 125-127).

Homework Two Due (09/18)

Week Four (September 21st-September 25th): Informal Fallacies Continued
Reading(s): No new reading.

Homework Three Due (9/25)

Week Five (September 28th-October 2nd): Fallacies Completed, Review, and Exam
Reading(s): No New Reading.
Exam available September 30th-October 2nd.
No class on Friday, October 2nd.

Week Six (October 5th-October 9th): Introduction to Syllogistic Reasoning
Reading: A Concise Introduction to Logic Chapter Four (pages 206-227).

Homework Four Due (10/9)

Week Seven (October 12th-October 16th): Form and Evaluation of Syllogisms
Reading: A Concise Introduction to Logic Chapter Five (pages 274-302).

Homework Five Due (10/16)

Week Eight (October 19th-October 23rd): Translation and Symbolization
Readings: A Concise Introduction to Logic Chapter Six (pages 327-350).

Homework Six Due (10/23)

Week Nine (October 26th-October 30th): Translation Continued and Truth Tables
Reading(s): A Concise Introduction to Logic Chapter Six (pages 354-366).
Homework Seven Due (10/30)

Week Ten (November 2nd-November 6th): Truth Tables Continued, Review and Exam
Reading(s): No new reading.
Exam available November 4th-6th
No class on Friday, November 6th.

Week Eleven (November 9th-November 13th): Method of Deduction
Reading(s): A Concise Introduction to Logic Chapter Seven (pages 403-432).
Homework Eight Due (11/13)

Week Twelve (November 16th-November 20th): Method of Deduction Completed and Proving Invalidity.
Reading(s): A Concise Introduction to Logic Chapter Seven (pages 440-469).
Homework Nine Due (11/20)

Week Thirteen (November 23rd-November 27th): Introduction to Predicate Logic and Thanksgiving.
Reading(s): A Concise Introduction to Logic Chapter Eight (470-502).

Week Fourteen (November 30th-December 4th): Predicate Logic Completed
Reading(s): No new reading.
Homework Ten Due (12/04)

Week Fifteen (December 7th-December 9th): Review
Reading(s): No new reading.
Final Exam Available on Using Proctorio December 14th-18th.

Library Services

All USU students attending classes in Logan, at our Regional Campuses, or online can access all databases, e-journals, and e-books regardless of location. Additionally, the library will mail printed books to students, at no charge to them. Students can also borrow books from any Utah academic library. Take advantage of all library services and learn more at libguides.usu.edu/rc. (Links to an external site.)

Classroom Civility

Utah State University supports the principle of freedom of expression for both faculty and students. The University respects the rights of faculty to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede the learning process. Disruptive classroom behavior will not be tolerated. An individual engaging in such behavior may be subject to disciplinary action. Read Student Code Article V Section V-3 (Links to an external site.) for more information.

University Policies & Procedures

COVID-19 Classroom Protocols

In order to continue to provide a high standard of instruction at USU, and to limit the spread of COVID-19 during the pandemic, students are asked to follow certain classroom protocols during the fall 2020 semester. These protocols are in place not only for your safety but also the safety of the rest of the campus community. You will be asked to clean your desk area at the start of each class, sit in designated seats, wear face coverings, and follow dismission instructions. There may be individual medical circumstances that prevent some students from using face coverings. These circumstances will be rare, but if they do exist, we ask that everyone be respectful. It is imperative that we each do our part so that on-campus instruction can continue.

Academic Freedom and Professional Responsibilities

Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and creative activities, subject to
the limitations imposed by professional responsibility. Faculty Code Policy #403 (Links to an external site.) further defines academic freedom and professional responsibilities.

**Academic Integrity – "The Honor System"**

Each student has the right and duty to pursue his or her academic experience free of dishonesty. To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge:

"I pledge, on my honor, to conduct myself with the foremost level of academic integrity."

A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- Espouses academic integrity as an underlying and essential principle of the Utah State University community;
- Understands that each act of academic dishonesty devalues every degree that is awarded by this institution; and
- Is a welcomed and valued member of Utah State University.

**Academic Dishonesty**

The instructor of this course will take appropriate actions in response to Academic Dishonesty, as defined the University’s Student Code. Acts of academic dishonesty include but are not limited to:

- **Cheating**: using, attempting to use, or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity. Unauthorized assistance includes:
  - Working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done "individually;"
  - Depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
  - Substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work;
  - Acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission;
  - Continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity;
  - Submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or engaging in any form of research fraud.

- **Falsification**: altering or fabricating any information or citation in an academic exercise or activity.
- **Plagiarism**: representing, by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgment. It also includes using materials prepared by another person or by an agency engaged in the sale of term papers or other academic materials.

For additional information go to: ARTICLE VI. University Regulations Regarding Academic Integrity (Links to an external site.)

**Sexual Harassment/Title IX**

Utah State University is committed to creating and maintaining an environment free from acts of sexual misconduct and discrimination and to fostering respect and dignity for all members of the USU community. Title IX and USU Policy 339 (Links to an external site.) address sexual harassment in the workplace and academic setting. The university responds promptly upon learning of any form of possible discrimination or sexual misconduct. Any individual may contact USU's Office of Equity (Links to an external site.) for available options and resources or clarification. The university has established a complaint procedure to handle all types of discrimination complaints, including sexual harassment (USU Policy 305 (Links to an external site.)), and has designated the Office of Equity Director/Title IX Coordinator as the official responsible for receiving and investigating complaints of sexual harassment.

**Withdrawal Policy and "I" Grade Policy**

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances, but not due to poor performance or to retain financial aid. The term 'extenuating' circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor.

**Students with Disabilities**

USU welcomes students with disabilities. If you have, or suspect you may have, a physical, mental health, or learning disability that may require accommodations in this course, please contact the Disability Resource Center (DRC) (Links to an external site.) as early in the semester as possible (University Inn # 101, (435) 797-2444, drc@usu.edu). All disability related accommodations must be approved by the DRC. Once approved, the DRC will coordinate with faculty to provide accommodations.

Students who are at a higher risk for complications from COVID-19 or who contract COVID-19 may also be eligible for accommodations.

**Diversity Statement**
Regardless of intent, careless or ill-informed remarks can be offensive and hurtful to others and detract from the learning climate. If you feel uncomfortable in a classroom due to offensive language or actions by an instructor or student(s) regarding ethnicity, gender, or sexual orientation, contact:

- Division of Student Affairs: https://studentaffairs.usu.edu (Links to an external site.), (435) 797-1712, studentservices@usu.edu, TSC 220
- Student Legal Services: https://ususa.usu.edu/student-association/student-advocacy/legal-services (Links to an external site.), (435) 797-2912, TSC 326,
- Access and Diversity: http://accesscenter.usu.edu (Links to an external site.), (435) 797-1728, access@usu.edu; TSC 315
- Multicultural Programs: http://accesscenter.usu.edu/multiculture (Links to an external site.), (435) 797-1728, TSC 315
- LGBTQA Programs: http://accesscenter.usu.edu/lgbtqa (Links to an external site.), (435) 797-1728, TSC 3145
- Provost's Office Diversity Resources: https://www.usu.edu/provost/diversity (Links to an external site.), (435) 797-8176

You can learn about your student rights by visiting:
The Code of Policies and Procedures for Students at Utah State University: https://studentconduct.usu.edu/studentcode (Links to an external site.)

**Grievance Process**

Students who feel they have been unfairly treated may file a grievance through the channels and procedures described in the Student Code: Article VII (Links to an external site.).

**Full details for USU Academic Policies and Procedures can be found at:**

- Student Conduct (Links to an external site.)
- Student Code (Links to an external site.)
- Academic Integrity (Links to an external site.)
- USU Selected Academic Policies and Procedures (Links to an external site.)
- USU Academic Policies and Procedures (Links to an external site.)
- Academic Freedom and Professional Responsibility Policy (Links to an external site.)

**Emergency Procedures**

In the case of a drill or real emergency, classes will be notified to evacuate the building by the sound of the fire/emergency alarm system or by a building representative. In the event of a disaster that may interfere with either notification, evacuate as the situation dictates (i.e., in an earthquake when shaking ceases or immediately when a fire is discovered). Turn off computers and take any personal items with you. Elevators should not be used; instead, use the closest stairs.
Mental Health

Mental health is critically important for the success of USU students. As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. Utah State University provides free services for students to assist them with addressing these and other concerns. You can learn more about the broad range of confidential mental health services available on campus at Counseling and Psychological Services (CAPS) (Links to an external site.). Students are also encouraged to download the "SafeUT App" (Links to an external site.) to their smartphones. The SafeUT application is a 24/7 statewide crisis text and tip service that provides real-time crisis intervention to students through texting and a confidential tip program that can help anyone with emotional crises, bullying, relationship problems, mental health, or suicide related issues.