

2023 Spring Introduction to Logic (PHIL-201-01)

PHIL-201

Spring 2023 3.00000 Credits 01/09/2023 to 05/05/2023 Modified 05/03/2023

Meeting Times

This asynchronous course is fully online in CEI's Canvas system, with no synchronous course meetings.

Contact Information

- **Instructor:** Zachary Fruhling
- **Email (CEI):** zachary.fruhling@cei.edu
- **Email (Personal):** zacharyfruhling@gmail.com
- **Phone/Text:** 831-331-6940
- **Office Hours:** By appointment via phone/Zoom
 - See Canvas course for Zoom meeting link.
- **Instructor Website:** <https://www.zacharyfruhling.com/> (<https://www.zacharyfruhling.com/>)

Course Description

An introduction to the concepts and methods of deductive and inductive logic, with special emphasis on the use of logical methods to identify, analyze, construct, and evaluate everyday arguments.

Textbook & Materials

A Concise Introduction to Logic

Author: Patrick J. Hurley and Lori Watson

Publisher: Cengage

Edition: 13th

ISBN: 9781305958098

Availability: Campus Bookstore

Note: Previous editions of the textbook are **not** permitted for this course.

Institutional Student Learning Outcomes

Institutional Student Learning Outcomes:

CEI has established a blueprint for academic success based on three institutional student learning outcomes that are incorporated throughout the curriculum. All students are expected to attain proficiency in each of these areas as part of any associate's degree. The institutional student learning outcomes which are incorporated into this course appear in text below:

Critical Thinking:

1. Identify a problem
2. Identify and articulate what is known:
3. Seek additional information as needed
4. Generate possible solution strategies
5. Evaluate Solutions

Communication:

1. Use of Sources
2. Rhetorical Knowledge
3. Critical Sender/Receiver
4. Process Knowledge

Civic and Global:

1. Ethical Conduct
2. Civic Learning
3. Responsible Citizenship
4. Diverse Perspectives

Program Outcomes

General Education Program Outcomes:

1. Higher-level thinking which uses qualitative and quantitative reasoning.
2. Effective written, oral, visual, electronic and/or other modes of communication.
3. Functional knowledge of connections among themes and patterns in the social and natural world.

Course Outcomes

Course-Level Outcomes:

1. Recognize arguments and their parts (premises and conclusions).
2. Distinguish between different types of deductive and inductive arguments.
3. Evaluate deductive arguments for validity and soundness.
4. Represent the structure of English-language arguments in propositional and predicate logic.
5. Use the truth table method for evaluating the validity of arguments in propositional logic.

6. Use the natural deduction (proof) method for demonstrating the validity of arguments in both propositional and predicate logic.

✓ Grading & Assignments

- Your grade in this online course will consist of 15 weekly assignments worth 100 points each, along with an extra credit assignment in Week 17 of the course, and along with a required Academic Integrity Agreement assignment due at the end of Week 1 (worth 10 points).
- Weekly assignments must be submitted via the corresponding assignment in Canvas in a single file (PDF, Word, etc.).
- Assignments will not be accepted by email.
- It is up to you to ensure that I can access and open the files containing your weekly assignments. If I cannot open your work, you will not receive credit for it.
- Opportunity will be provided for you to improve your score on previously submitted homework assignments, but it is highly recommended that you keep up with the weekly assignments, as logic is highly cumulative.
- There are no high-stakes exams in this online course beyond the weekly assignments.
- Final grades will be based on your performance on the weekly course assignments according to the following grading scale:

A	4.0	93% - 100%
A-	3.7	90% - 92%
B+	3.3	87% - 89%
B	3.0	83% - 86%
B-	2.7	80% - 82%
C+	2.3	77% - 79%
C	2.0	73% - 76%
C-	1.7	70% - 72%
D+	1.3	67% - 69%
D	1.0	63% - 66%

D-	0.7	60% - 62%
F	0.0	0% - 59%

Institutional Policies

Inclusion Statement

At CEI we value diverse opinions and input. We understand that students come from all walks of life and from varying backgrounds. We endeavor to teach critical thinking, backed by valid evidence, and expect civil discourse both in and out of the classroom. Students should feel comfortable offering alternate viewpoints so long as they are not discriminatory or disrespectful.

Academic Integrity

Academic integrity is the moral code or ethical policy of academia. This includes values such as avoidance of cheating or plagiarism and maintenance of academic standards. Maintaining academic integrity involves: creating and expressing your own ideas in course work; acknowledging all sources of information; completing assignments independently or acknowledging collaboration; accurately reporting results when conducting your own research or with respect to labs; and honesty during exams.

All CEI students are expected to display appropriate conduct while on campus or attending college-sponsored activities. The College will take appropriate action for any demonstration of academic dishonesty. Academic dishonesty is defined as a willful perversion of truth, stealing, cheating, or defrauding in instructional matters. Students will have engaged in academic dishonesty: If they have copied the work of another without attribution, willfully allowed another to copy their work, falsified information, participated in unauthorized collaboration, obtained an examination prior to its administration, used unauthorized aid(s) during an examination, knowingly assisted someone else during an examination, submitted the work of another as though it were their own, committed other acts of plagiarism, or actions deemed to be dishonest by the instructor.

Violations of academic integrity may be subject to the Student Conduct process. Please see the [Academic Integrity Code, Policy 304 \(https://cei.edu/hr/policies-procedures/student-affairs?p=304\)](https://cei.edu/hr/policies-procedures/student-affairs?p=304).

Policies & Catalog

CEI's student-related policies and procedures can be found in the following places:

1. The CEI catalog has updates on all of our student-related procedures. "Catalog-rights" are given when students are admitted to specific programs. Visit: www.cei.edu/catalog (<https://www.cei.edu/catalog>).
2. Some CEI Policies impacting students can be found at www.cei.edu/hr/policies-procedures (<https://www.cei.edu/hr/policies-procedures>). Policies specifically impacting students:

cei.edu/hr/policies-procedures/student-affairs (<https://cei.edu/hr/policies-procedures/student-affairs>).

3. Your student handbook has bylaws, policies, procedures and the links above.
4. Students please review the Student Code of Conduct, Policy 603: <https://cei.edu/hr/policies-procedures/student-affairs?p=603> (<https://cei.edu/hr/policies-procedures/student-affairs?p=603>).
5. Students can send any concern to Student.Concern@cei.edu or 208-524-3000 (Option 4).

The catalog includes information regarding auditing a class, incomplete grade contracts, transfer credits and withdrawals. For additional information contact the Registrar's Office: 208-524-3000 (Option 4) or assistant.registrar@cei.edu (<mailto:assistant.registrar@cei.edu>).

Report a Concern

[Report a Concern](https://cm.maxient.com/reporting.php?CollegeofEasternID) (<https://cm.maxient.com/reporting.php?CollegeofEasternID>) allows you to report any concerning behavior you experience or see others experience on campus. For example, harassment, sexual harassment, assault, food insecurity, homelessness, ethics violations, or students/people otherwise struggling physically, emotionally, mentally, or otherwise. Obviously, if it is an emergency, call 911, but if you want to report any concern, personal, academic, or emotional/mental/physical, you can do so with one of these forms. Reporting can be done either using one's name or anonymously.

Student General Services

- a. **Center for New Directions (CND):** BLDG 5, RM# 591 / 208-535-5363.
- b. **Counseling Center:** cei.edu/counseling-center / 208-535-5622 to schedule an appointment.
- c. **Equity & Title IX:** cei.edu/hr/policies-procedures/student-affairs/view?p=602 (<https://www.cei.edu/hr/policies-procedures/student-affairs?p=602>). / 208-535-5491
- d. **Financial Aid:** BLDG 3, RM# 353 / 208-535-5374 / aid@cei.edu (<mailto:financial.aid@cei.edu>) / www.cei.edu/financial-aid (<https://www.cei.edu/financial-aid>).
- e. **Student Life:** Student Life office located in Building 3, RM#351.
- f. **Transfer & Transitions:** <http://www.cei.edu/programs-of-study/general-education/transfer-transitions> (<https://www.cei.edu/programs-of-study/general-education/transfer-transitions>).

Equity & Title IX

Equal rights and access are paramount to the student experience at CEI and is the law. "Title IX" specifically refers to a gender equity law passed in 1972 which states that "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance." A link to all equity, Title IX, and all student-related policies can be found at www.cei.edu/hr/policies-procedures/student-affairs (<https://www.cei.edu/hr/policies-procedures/student-affairs>) as well as several policies and procedures in our CEI Catalog: www.cei.edu/catalog (<https://www.cei.edu/catalog>), which is updated yearly.

CEI Title IX policy: www.cei.edu/hr/policies-procedures/student-affairs/view?p=602 (<https://www.cei.edu/hr/policies-procedures/student-affairs?p=602>).

Title IX contact information for students: Student.Concern@cei.edu
(<mailto:Student.Concern@cei.edu>) OR 208-524-3000 (Option 4).

Disability Resource Center

The Disability Resource Center is located inside the Center for New Directions.

ADA Policy – CEI is committed to providing educational opportunities to all qualified individuals. CEI complies with the Americans with Disabilities Act of 1990 (ADA) as amended in 2008 (ADAAA) and Section 504 of the Rehabilitation Act of 1973, which states that no qualified person shall, because of their disability, be denied access to, participation in, or the benefits of, any program or activity operated by the College.

Students with questions about accessibility or requesting reasonable accommodations should contact the Disability Resource Center: Building 5, Room 591, 208-535-5462; disability.resources@cei.edu
(<mailto:disability.resources@cei.edu>).

Online/Digital Delivery Methods

When registering for a course, take note of the [delivery method \(https://cei.edu/online/delivery-methods\)](https://cei.edu/online/delivery-methods) (HyFLex, Lecture, IWC, Hybrid, Online) and familiarize yourself with the parameters of each. Please know that variations from those parameters, should you request any, are at the discretion of the instructor. Your instructor is not obligated to offer accommodations that are not documented through [Disability Resources \(https://www.cei.edu/disability\)](https://www.cei.edu/disability). You are encouraged to work closely with your instructor should a need to deviate from the teaching method arise.

Information Technology (I.T) - Help Desk

The I.T. Help Desk is here to provide computer and software support for students. CEI IT Help Desk They can also help with password resets. Their website is www.cei.edu/mycei/help-deskit
(<https://www.cei.edu/mycei/help-deskit>) or call 208-535-5444.

Library

The CEI Library provides books, periodicals, audio-visual materials, and online resources designed to support the College's academic programs and courses. The library includes a computer lab and two group study spaces. Fast, free interlibrary loan is available. The library's catalog and databases can be accessed at <http://www.cei.edu/library> (<https://www.cei.edu/library>). Contact information: Nathan Brown, College Librarian: 208-535-5349 or nathan.brown@cei.edu (<mailto:nathan.brown@cei.edu>); Circulation desk phone number: 208-535-5312.

Testing Center (Optional)

Some exams require proctoring through the Testing Center in Building 1. If you are required to take an exam through the Testing Center, you will need to follow all Testing Center policies and procedures. Failure to do so can result in disciplinary action. Please be aware that all testing needs to be completed

by the time the Testing Center closes each day. Hours vary each day and can be found at www.cei.edu/testing-center (<https://www.cei.edu/testing-center>). You can contact the Testing Center at 208-535-5438 or email testing_center@cei.edu (mailto:testing_center@cei.edu).

Tutoring Center

The tutoring center provides services for math, science and writing. Make an appointment on our web site: www.cei.edu/tutoring-center (<https://www.cei.edu/tutoring-center>). Email tutoringcenter@cei.edu (<mailto:tutoringcenter@cei.edu>) to see how we can help you succeed! The tutoring center is located in Building 1, Room 125. Call 208-535-5490.

Schedule

1/15:	<ul style="list-style-type: none">• Hurley, Section 1.1: Arguments, Premises, and Conclusions• Hurley, Section 1.2: Recognizing Arguments• Hurley, Section 1.3: Deduction and Induction• Hurley, Section 1.4: Validity, Truth, Soundness, Strength, Cogency• Week 1 Academic Integrity Agreement Assignment Due• Week 1 Assignment Due
1/22:	<ul style="list-style-type: none">• Hurley, Section 6.1: Symbols and Translation• Hurley, Section 6.2: Truth Functions• Week 2 Assignment Due
1/29:	<ul style="list-style-type: none">• Hurley, Section 6.3: Truth Tables for Propositions• Hurley, Section 6.4: Truth Tables for Arguments• Week 3 Assignment Due
2/5:	<ul style="list-style-type: none">• Hurley, Section 7.1: Rules of Implication I• Week 4 Assignment Due
2/12:	<ul style="list-style-type: none">• Hurley, Section 7.2: Rules of Implication II• Week 5 Assignment Due
2/19:	<ul style="list-style-type: none">• Hurley, Section 7.3: Rules of Replacement I• Week 6 Assignment Due
2/26:	<ul style="list-style-type: none">• Hurley, Section 7.4: Rules of Replacement II• Week 7 Assignment Due

3/5:	<ul style="list-style-type: none"> • Hurley, Section 7.5: Conditional Proof • Hurley, Section 7.6: Indirect Proof • Week 8 Assignment Due
3/12:	<ul style="list-style-type: none"> • Hurley, Section 7.7: Proving Logical Truths • Week 9 Assignment Due
3/19:	<ul style="list-style-type: none"> • Hurley, Section 8.1: Symbols and Translation • Week 10 Assignment Due
3/26:	<ul style="list-style-type: none"> • Spring Break • Nothing Due
4/2:	<ul style="list-style-type: none"> • Hurley, Section 8.2: Using the Rules of Inference • Week 12 Assignment Due
4/9:	<ul style="list-style-type: none"> • Hurley, Section 8.3: Quantifier Negation Rule • Week 13 Assignment Due
4/16:	<ul style="list-style-type: none"> • Hurley, Section 8.4: Conditional and Indirect Proof • Week 14 Assignment Due
4/23:	<ul style="list-style-type: none"> • Hurley, Section 8.6: Relational Predicates and Overlapping Quantifiers • Week 15 Assignment Due
4/30:	<ul style="list-style-type: none"> • Hurley, Section 8.7: Identity • Week 16 Assignment Due
5/5:	<ul style="list-style-type: none"> • Optional Extra Credit Assignment Due • All Coursework Due by Friday, 5/5, at 11:59 PM, with no exceptions.

Additional Items

Oral/Written Communication/Humanities Statement on Plagiarism:

Everything submitted or presented in this course, except for acknowledged sources, should be your original work. It should also be constructed upon a plan of your own devising. The College of Eastern Idaho (CEI) Code of Student Conduct defines plagiarism as “the adoption or reproduction of ideas, words, or statements of another person as one’s own without acknowledgment.” The Department of Oral/Written Communication and Humanities further stipulates that plagiarism includes:

1. Copying from the writings or works of others into one's academic assignment without attribution, or submitting such work as if it were one's own;
2. Using the views, opinions, or insights of another without acknowledgment; or
3. Paraphrasing the characteristic or original phraseology, metaphor, or other literary device of another without proper attribution.

Unacknowledged use of the words or ideas of others from any medium (print, digital, or otherwise) is plagiarism. The submission of plagiarized work will, under departmental rules, render the offending student subject to an F grade for the work in question or for the whole course, and will also make him/her liable for referral to CEI Student Concerns in Student Services (using Maxient) for further disciplinary action.

Your instructor may have further rules and regulations defining, policing, and enforcing plagiarism.