

*College of Eastern Idaho Syllabus*

**Course Number/Section:** PHIL 201 | Introduction to Logic | Credits: 3

**Course Date(s):** Fall 2020, 8/24/2020 through 12/11/2020  
  
**Course Meeting Times:** Online (Asynchronous); first assignment due Sunday 8/30/2020 at 11:59 PM  
  
**Course Location:** Blackboard: [PHIL-201-01](https://cei.blackboard.com/webapps/blackboard/execute/modulepage/view?course_id=_3506_1&cmp_tab_id=_5478_1&editMode=true&mode=cpview)  
  
**Instructor:** **Zachary Fruhling**

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Email: [zacharyfruhling@gmail.com](mailto:zacharyfruhling@gmail.com)

Phone: 831-331-6940

Website: <https://www.zacharyfruhling.com>

Office Hours: Wednesdays at 5:00 PM via Zoom (link in Blackboard).

**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.

**Course Materials:**

* Textbook Title: [*A Concise Introduction to Logic*](https://amzn.to/2FDXvSq), 13th edition by Patrick Hurley and Lori Watson
* ISBN: [9781305958098](https://amzn.to/2FDXvSq)
* Publisher: Cengage

**COVID-19 Mask/Face Covering Policy:** Students will be required to wear face coverings or masks in buildings at all times. Masks are available for free at the Kiosk desk in Building 3. Specific details are available at <http://www.cei.edu/covid19-information/>.

**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 degree. The institutional student learning outcomes which are incorporated into this course appear in bold 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

**Ways of Knowing Outcomes:**

1. Recognize and describe humanistic, historical, or artistic works within problems and patterns of the human experience.
2. Perceive and understand formal, conceptual, and technical elements specific to philosophy.
3. Analyze, evaluate, and interpret texts, objects, events, or ideas in their cultural, intellectual or historical contexts.
4. Develop critical perspectives or arguments about the subject matter, grounded in evidence-based analysis.

**Arts & Humanities**

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| --- | --- | --- | --- | --- | --- | --- |
| Recognize and describe humanistic, historical, or artistic works or problems within patterns of the human experience. | Distinguish and apply terminologies,  Methodologies, processes, epistemologies, and traditions specific to the discipline(s). | Perceive and understand formal, conceptual, and technical elements specific to the discipline. | Analyze, evaluate, and interpret texts, objects, events, or ideas in their cultural, intellectual or historical contexts. | Interpret artistic and/or humanistic works through the creation of art or performance. | Develop critical perspectives or arguments about the subject matter, grounded in evidence based analysis. | Demonstrate self-reflection, intellectual elasticity, widened perspective, and respect for diverse viewpoints. |

**Mathematical**

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| Read, interpret, and communicate mathematical concepts. | Represent and interpret information/data. | Select, execute and explain appropriate strategies/procedures when solving mathematical problems. | Apply quantitative reasoning to draw appropriate conclusions and support them. |

**Oral Communication**

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| Research, discover, and develop information resources and structure spoken messages to increase knowledge and understanding. | Research, discover, and develop evidence-based reasoning and persuasive appeals for ethically influencing attitudes, values, beliefs, or behaviors. | Adapt spoken messages to the diverse personal, ideological, and emotional needs of individuals, groups, or contexts. | Employ effective spoken and nonverbal behaviors that support communication goals and illustrate self-efficacy. | Listen in order to effectively and critically evaluate the reasoning, evidence, and communication strategies of self and others. | Understand key theories, perspectives, principles, and concepts in the Communication discipline, as applied to oral communication. |

**Scientific**

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| --- | --- | --- | --- | --- |
| Apply foundational knowledge and models of a natural or physical science to analyze and/or predict phenomena. | Understand the scientific method and apply scientific reasoning to critically evaluate assertions. | Interpret and communicate scientific information via written, spoken, and/or visual representations. | Describe the relevance of specific scientific principles to the human experience. | Form and test a hypothesis in the laboratory, classroom, or field using discipline-specific tools and techniques for data collection and/or analysis. |

**Social & Behavioral**

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| --- | --- | --- | --- | --- |
| Demonstrate knowledge of the theoretical and conceptual frameworks of a particular Social or Behavioral Science discipline. | Develop an understanding of self and the world by examining the dynamic interaction of individuals, groups, and societies as they shape and are shaped by history, culture, institutions, and ideas. | Utilize Social or Behavioral Sciences approaches, such as research methods, inquiry, or problem- solving, to examine the variety of perspectives about human experiences. | Evaluate how reasoning, history, or culture informs and guides individual, civic, or global decisions. | Understand and interpret similarities and differences among and between individuals, cultures, or societies across space and time. |

**Written Communication**

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| Use flexible writing process strategies to generate, develop, revise, edit, and proofread texts. | Adopt strategies and genre that are appropriate to the rhetorical situation. | Use inquiry-based strategies to conduct research that explores multiple and diverse ideas and perspectives, appropriate to the rhetorical context. | Use rhetorically appropriate strategies to evaluate, represent, and respond to the ideas and research of others. | Address readers’ biases and assumptions with well-developed evidence-based reasoning. | Use appropriate conventions for integrating, citing, and documenting source material as well as for surface-level language and style. | Read, interpret, and communicate key concepts in writing and rhetoric. |

**General Education Program Outcomes**:

1. Demonstrate effective oral and written communication.
2. Demonstrate the ability to use critical thinking.
3. Be able to find, understand and critically use information.
4. Be able to use technology effectively and appropriately.

**Course Outcomes:** (Insert approved student-learning outcomes here.) These 4-6 outcomes describe what major things students are able to do by the end of the term. (These outcomes should be the same for all courses of the same number.)

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, for a total of 1500 points each, along with an extra credit assignment in Week 16 of the course.
* Weekly assignments must be submitted via the corresponding assignment in Blackboard 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.

**CEI grading scale (refer to CEI catalog)**

**EXAMPLE of a grading scale:**   
A 95-100 Outstanding performance  
A- 90-94 Superior   
B+ 87-89 Excellent   
B 85-86 Very good   
B- 80-84 Good   
C+ 77-79 Better than satisfactory   
C 75-76 Satisfactory

C- 70-74 Below Satisfactory   
D+ 67-69 may not pass requirements

D 65-66 may not pass requirements

D- 60-64 may not pass requirements  
F 0-59 Not passing

I Incomplete (OPTIONAL: include your policy on incompletes.)

W Withdrawal (policy at CEI)

**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 Student Handbook at <http://www.cei.edu/current-student>.

**CEI Student Affairs**

**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](http://www.cei.edu/catalog).
2. Some CEI Policies impacting students can be found at [www.cei.edu/hr/policies-procedures](http://www.cei.edu/hr/policies-procedures). Policies specifically impacting students: [www.cei.edu/hr/policies-procedures/student-affairs](http://www.cei.edu/hr/policies-procedures/student-affairs)*.*
3. Your student handbook has bylaws, policies, procedures and the links above.
4. Students can send any concern to [Student.Concern@cei.edu](mailto: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).

**Student General Services:**

* 1. **Center for New Directions (CND):** BLDG 5, RM# 591 / 208-535-5363.
  2. **Counseling Center:** [www.cei.edu/counseling-center](http://www.cei.edu/counseling-center) / 208-535-5622 to schedule an appointment.
  3. **Equity & Title IX:** [www.cei.edu/hr/policies-procedures/student-affairs/view?p=602](http://www.cei.edu/hr/policies-procedures/student-affairs/view?p=602). / 208-535-5491
  4. **Financial Aid:** BLDG 3, RM# 353 / 208-535-5374 / [financial.aid@cei.edu](mailto:financial.aid@cei.edu) / [www.cei.edu/financial-aid](http://www.cei.edu/financial-aid).
  5. **Student Life:** Student Life office located in Building 3, RM#351.
  6. **Transfer & Transitions:** <http://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](http://www.cei.edu/hr/policies-procedures/student-affairs) as well as several policies and procedures in our CEI Catalog: [www.cei.edu/catalog](http://www.cei.edu/catalog), which is updated yearly.

CEI Title IX policy: [www.cei.edu/hr/policies-procedures/student-affairs/view?p=602](http://www.cei.edu/hr/policies-procedures/student-affairs/view?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 (Located inside 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).

**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](http://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>. 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.

**Tutoring Center:**

The tutoring center provides services for math, science and writing. Make an appointment on our website: [www.cei.edu/tutoring-center](http://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.

**Disclaimer:**Changes to this schedule may be necessary as this course progresses. When a need to change the schedule arises students will be informed in advance via an announcement in Blackboard.

**Tentative Course Schedule:**

Weekly assignments are due in Blackboard by 11:59 PM on Sunday night of the weekend following each week. See the assignment instructions in Blackboard for specific textbook exercises and instructions for each weekly assignment.

**Week 1:**

* Textbook Reading:
  + 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
* Submit academic agreement in Blackboard, Monday 8/24 by 11:59 PM
* Week 1 Assignment due 8/30/2020 by 11:59 PM

**Week 2:**

* Textbook Reading:
  + Hurley, Section 6.1: Symbols and Translation
  + Hurley, Section 6.2: Truth Functions
* Week 2 Assignment due 9/6/2020 by 11:59 PM

**Week 3:**

* Textbook Reading:
  + Hurley, Section 6.3: Truth Tables for Propositions
  + Hurley, Section 6.4: truth Tables for Arguments
* Week 3 Assignment due 9/13/2020 by 11:59 PM

**Week 4:**

* Textbook Reading:
  + Hurley, Section 7.1: Rules of Implication I
* Week 4 Assignment due 9/20/2020 by 11:59 PM

**Week 5:**

* Textbook Reading:
  + Hurley, Section 7.2: Rules of Implication II
* Week 5 Assignment due 9/27/2020 by 11:59 PM

**Week 6:**

* Textbook Reading:
  + Hurley, Section 7.3: Rules of Replacement I
* Week 6 Assignment due 10/4/2020 by 11:59 PM

**Week 7:**

* Textbook Reading:
  + Hurley, Section 7.4: Rules of Replacement II
* Week 7 Assignment due 10/11/2020 by 11:59 PM

**Week 8:**

* Textbook Reading:
  + Hurley, Section 7.5: Conditional Proof
  + Hurley, Section 7.6: Indirect Proof
* Week 8 Assignment due 10/18/2020 by 11:59 PM

**Week 9:**

* Textbook Reading:
  + Hurley, Section 7.7: Proving Logical Truths
* Week 9 Assignment Due: 10/25/2020 by 11:59 PM

**Week 10:**

* Textbook Reading:
  + Hurley, Section 8.1: Symbols and Translation
* Week 10 Assignment Due 11/1/2020 by 11:59 PM

**Week 11:**

* Textbook Reading:
  + Hurley, Section 8.2: Using the Rules of Inference
* Week 11 Assignment due 11/8/2020 by 11:59 PM

**Week 12:**

* Textbook Reading:
  + Hurley, Section 8.3: Quantifier Negation Rule
* Week 12 Assignment due by 11/15/2020 by 11:59 PM

**Week 13:**

* Textbook Reading:
  + Hurley, Section 8.4: Conditional and Indirect Proof
* Week 13 Assignment due by 11/22/2020 by 11:59 PM

**Week 14:**

* Textbook Reading:
  + Hurley, Section 8.6: Relational Predicates and Overlapping Quantifiers
  + **Note:** Skip section 8.5.
* Week 14 Assignment due 11/29/2020 by 11:59 PM

**Week 15:**

* Textbook Reading:
  + Hurley, Section 8.7: Identity
* Week 15 Assignment due 12/6/2020 by 11:59 PM

**Week 16:**

* There is no new textbook reading for Week 16.
* Optional Extra Credit Assignment due 12/11/2020 by 11:59 PM

The Registrar’s Office recommends reviewing the following ([www.cei.edu/catalog](http://www.cei.edu/catalog)):

* Last day to add/drop
* Last day to withdraw from regular full-term courses
* Last day to withdraw from short-term courses