Welcome to Philosophy 8 – Introduction to Logic

COURSE DESCRIPTION

As the college catalog reports, this course focuses on the basic elements of reasoning, analysis of language as communication, propositional and class logic, definitions and fallacies, induction and scientific methods.

The primary objective of the course is to help you improve your analytical skills and, more generally, to help you to reason well. Our course focuses on the elements of logic. We’ll concentrate on arguments, because these are an important means by which we reason. We’ll learn to recognize, analyze and evaluate arguments. We’ll look at what distinguishes good arguments from bad arguments and what the most common fallacies are in arguments.

Course Prerequisite: Eligibility for English 1A is recommended

TOPICS TO BE COVERED IN PHILOSOPHY 8 01/17/2015-05/15/2015

1. BASIC CONCEPTS
   - Arguments
   - Premises and Conclusions
   - Recognizing Arguments
   - Deduction and Induction
   - Validity, Truth, Soundness
   - Strength, Cogency
   - Argument Forms
   - Proving Invalidity

2. INFORMAL FALLACIES
   - Fallacies in General
   - Fallacies of Relevance
   - Fallacies of Weak Induction
   - Fallacies of Presumption, Ambiguity, and Grammatical Analogy
   - Fallacies in Ordinary Language

3. CATEGORICAL PROPOSITIONS
   - The Components of Categorical Propositions
   - Quality, Quantity, and Distribution
   - Venn Diagrams and the Modern Square of Opposition
   - Conversion, Obversion, and Contraposition
   - The Traditional Square of Opposition
   - Venn Diagrams and the Traditional Standpoint

4. CATEGORICAL SYLLOGISMS
   - Standard Form
   - Mood, and Figure
• Venn Diagrams
• Rules and Fallacies

5. **PROPOSITIONAL LOGIC**
• Symbols and Translation
• Truth Functions
• Truth Tables for Propositions
• Truth Tables for Arguments
• Indirect Truth Tables*
• Argument Forms and Fallacies*

**COURSE OBJECTIVES:**

1. Differentiate between deductive and inductive arguments.
2. Recognize intensional and extensional definitions.*
3. Distinguish different types of fallacies in the categories of relevance, ambiguity, and presumption.
4. Identify means of avoiding informal fallacies.
5. Detect fallacies in a variety of arguments.
6. Analyze and evaluate different types of inductive reasoning.
7. Examine forms of categorical statements and analyze them by means of the squares of opposition and operations.
8. Determine the validity of syllogisms and sorites* employing Venn diagrams and/or syllogistic rules.
10. Construct truth tables to test statements and arguments in sentential logic.

* Will be covered insofar as time permits

**Expected Learning Outcomes:**

After completing this course:

• Students will recognize the logical structures of arguments, and be able to put arguments into forms suitable for symbolization and subsequent assessment.

• Students will be able to explain the difference between truth and the logical strength of argument forms, and demonstrate this knowledge through the assessment of formal and/or popular examples of reasoning processes.

• Students will be able to test symbolized arguments for validity by using standard methods for propositional, categorical, and/or predicate logic evaluations.

**TEXT:** A customized version of *A Concise Introduction to Logic, with Aplia* (12th edition, ISBN 9781305286221), by Patrick Hurley. The book includes just the chapters we can cover in a semester course. It comes with a payment code for the Aplia website that we will use and a set of practice tests. The bundle will be available at the ECC bookstore for around $170.00.
If you purchase the print version of Hurley online at Amazon, etc., and without the Aplia access code and the practice tests, you will have to buy the access code separately from the publisher and that will cost another $116.00 or so. In other words, buying a new or used printed book without the access code is a bad idea unless the price is $50 or less. However relatively inexpensive used copies of older editions of Hurley without an access code can sometimes be found on Amazon or elsewhere. Either of the last two older editions – 10th or 11th – should be OK if you can find one at a good price. You could then combine that used copy with the $116 access code for our Aplia homework website purchased separately. See the directions below for details on registering at Aplia.

If you don't need a print copy of Hurley's book, and would be satisfied with an online version, the portions of Hurley's text that we will be using will be available at the Aplia website. The website registration cost is less than the cost of the printed version of the text, bundled with an Aplia access code, that's available at our own bookstore. As the online chapters for our course become accessible at Aplia during the term, you can actually print them out on your home printer. The downside is that you won’t get the practice tests that are bundled with the printed text.

GRACE PERIOD: If you don't buy the printed textbook bundle at the ECC bookstore, you can still temporarily use Aplia for homework and access a digital version of the text by clicking the button marked "Go to my course. I'll pay later" when you register online for Aplia. Your payment or submission of an Aplia payment code will be due by the end of the day on February 8, 2015.

Logic is not a course in which you can begin reading the textbook two or three weeks after the term begins and still hope to do well. Our first test comes up relatively early in the term.

There will also be multiple handouts distributed at our course website. And don't forget to read my notes in the various Etudes “modules”! Those notes cover most, but not all, of the chapter sections of Hurley’s book.

For those who want a study guide for the text, the bookstore has a limited number of copies of Hurley's Study Guide for A Concise Introduction to Logic.

EXAMS: There will be four examinations in the course, including the final exam. Together, these will comprise 80% of your final grade. The first test (15%) will cover assignments and lectures related to chapter 1 of Hurley. The second exam (15%) will cover the same materials related to chapter 3 of the text. The third test (20%) will do the same for chapters 4 and 5. The final exam (30%) will review some of the earlier material from chapters 1 and 3 and will also cover chapter 6, or as much of chapter 6 as we can complete. The first three exams are online, using Etudes.

The final exam is on campus or elsewhere at a recognized college or university testing center with proctoring if prior arrangements are made by students with me and the testing center. See http://www.ncta-testing.org/cctc/find.php for a list of approved proctoring sites. In the Los Angeles area, both Rio Hondo College and UCLA offer proctoring services. Note: Testing centers normally charge around $25 for proctoring. Some college or university testing centers offering proctoring are not on the NCTA list.
You may use a dictionary during exams, but the tests are otherwise NOT open-book exams. The online and final exams are mainly multiple-choice tests, though there will be some short-answer questions.

**The Etudes Course Management System**

Since this is an online course, most of what we do will be done on the Net. For announcements, exams, and discussions, we'll be using a Web-based course-management system called “Etudes” that provides students online access to course materials, discussion boards and online quizzes. Most El Camino online courses use Etudes.

You should find the system fairly intuitive to use. However you can refer to the Etudes student user guide that I have added to the Resources area of our class website for help in navigating the system, reading and posting to discussion forums, taking exams, etc. You will need cookies enabled in your web browser and Adobe's Flash Player on your computer. If you don't have Flash Player already, you can get it for Windows XP/Vista/7 at http://www.adobe.com/shockwave/download/index.cgi?P1_Prod_Version=ShockwaveFlash and for Mac OS X (Intel) or Mac OS X (PowerPC) at http://www.adobe.com/shockwave/download/index.cgi?P1_Prod_Version=ShockwaveFlash&P2_Platform=MacOSX

Not all features of Etudes can be used on an iPhone or iPad. However Etudes has created a free IOS app – *Etudes inTouch!* – that will allow you to access certain features. The app is available for download from the iTunes Store.

You also need to make sure that you disable pop-up blocking in your web browser. Some features in Etudes and Aplia will not work if pop-up blocking is enabled.

You can log in to Etudes at https://myetudes.org/. To check the technical requirements for Etudes, go to the Etudes gateway https://myetudes.org/portal/site/!gateway/page/4243c7b4-9b68-45fc-0016-148ad08653aa

**HURLEY HOMEWORK AT Aplia:** Introductory logic courses don't require research papers, but they always require practice. Aplia is a website that we're using just for homework. (Everything else in the course that's online, including three exams, is done through Etudes.) Aplia lets you learn by doing. Each week during the course there will be online assignments. All homework assignments must be submitted on the web through Aplia in order to receive credit. There is no pencil-and-paper equivalent.

The homework in the course is essential to doing well. During all of the years in which ECC has offered this course online, very few have earned even a C in the course who didn't complete at least most of the homework. Because of the importance of homework, I will drop anyone who misses a significant number of assignments.

The assignments have a firm due date. We’re using Aplia’s “Grade It Now” mode in which you have as many as three tries for each set of homework questions. Each try is graded upon submission. If you would like to try another set of similar problems on the same topic, you can do that up to three times for each assignment. Your final (recorded) score for each exercise is the highest score of your attempts. This should help everyone who wants more opportunities for practice. Once the due date passes, Aplia records your highest score and you can no longer complete the assignment. After the due date, Aplia displays the correct answers and explanations for graded problems. You can review these even if you haven’t
done an assignment. Your score for the assignment will be on the Aplia Grades page. Do your assignments early to keep last-minute emergencies from getting in your way. See the course calendar below for the assignment schedule. The assignments for a particular period need to be completed before **11:45pm Pacific Time** of the last day of the period. For example, during the first week there are two assignments and these need to be submitted by January 25 at 11:45 PM. **There is no time limit on your work in completing each exercise as long as the submission deadline hasn't passed.** The homework questions are worth varying numbers of points. The course calendar indicates what the point value of each exercise is. Ordinarily there are two assignments each week, though in a week with an exam, there would just be one assignment.

To access Aplia:

1. **Connect to [http://www.aplia.com/](http://www.aplia.com/)**
2. **If you already have an Aplia account, sign in.** Enter our course key (WSPQ-CPFF-9L2L) in the box provided, and click the **Register** button.
   
   **If you don't have an account,** click the **Create a New Account** button, choose "Student Account" and enter our course key when prompted: **WSPQ-CPFF-9L2L**.

   Continue to follow the on-screen instructions. You will need to enter your Aplia payment code if you bought the textbook bundle at the ECC Bookstore. **Your payment code is not the same as the course key.** A payment code has the format XXXXX-XXX-XXXXX-XXX. A course key has the format XXXX-XXXX-XXXX. The course key is the same for everyone in class. The payment code is different for each.

3. **GRACE PERIOD: As mentioned earlier, you can postpone payment and temporarily use Aplia for homework and access a digital version of Hurley at the Aplia website by clicking the button labeled "Go to my course. I'll pay later"** However if you don't pay online or provide a payment code by **February 8**, your Aplia account can no longer be accessed.

If you are unsure whether your system meets Aplia's requirements, take the configuration test at [http://courses.aplia.com/af/support/config.jsp?&from=p_sup](http://courses.aplia.com/af/support/config.jsp?&from=p_sup) It takes just a few seconds and will provide detailed information on how to update your system if necessary. For both Aplia and Etudes, you will need Adobe's Flash Player on your computer.

### Platforms Supported By Aplia

The Aplia system only supports computers running Microsoft Windows or Apple Macintosh operating systems. **iPhones and iPads are not supported since they don't use Adobe Flash.**

<table>
<thead>
<tr>
<th>Windows</th>
<th>Macintosh</th>
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<tbody>
<tr>
<td>Aplia supports the following versions of Windows:</td>
<td>Aplia supports the following version of Macintosh:</td>
</tr>
<tr>
<td><strong>XP, Vista, Windows 7, 8</strong></td>
<td><strong>OS X versions 10.5 and later</strong></td>
</tr>
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### Browsers Supported By Aplia
Windows
- *Internet Explorer*: Versions 9.0 and later are supported
- *Firefox*: The two most recent versions are supported
- *Chrome*: The latest version is supported

Macintosh
- *Safari*: Versions 4.0 and later are supported
- *Firefox*: The two most recent versions are supported

Aplia requires that users have Javascript enabled on their system to access the site. Additionally, "popups" and cookies must be allowed for access to the full functionality of Aplia.

You can access an Aplia student FAQ at [http://www.aplia.com/support/student_faq.jsp](http://www.aplia.com/support/student_faq.jsp)

If you encounter any technical issues when you try to submit an answer in Aplia, you will see an error message. If this occurs, Aplia recommends the following:
1. Try to resubmit your answer.
2. If it still doesn't work, log out of the site, log in again, and try to submit your answer again.
3. If this last attempt fails, contact Aplia tech support.

Aplia tech support can be contacted at [http://support.cengage.com/Magellan/TechSupport/CreateCase.aspx?isLogless=yes&prodId=1-1G486LP](http://support.cengage.com/Magellan/TechSupport/CreateCase.aspx?isLogless=yes&prodId=1-1G486LP)
They should get back to you within one business day.

There are 4748 total points for your homework, but I will base your grade on a percentage of just 4400 points. In other words, if you miss an assignment because of computer problems or illness, etc., your grade won't necessarily suffer. Your homework as a whole is worth 20% of your course grade.

**GRADING POLICIES:** The number of points each homework assignment and exam is worth will vary from one to another. However letter grades will be assigned to exams and those letter grades, along with a letter grade for homework for the entire term, then become the basis for your course grade.

The assignment of letter grades for homework will be based upon these percentages of the maximum possible number of points:
- A = 90%
- B = 80%
- C = 65%
- D = 55%

For example, if you have 3960 points out of 4400 for homework, then you would have an A. The B range will begin at 3520 and the C range at 2860 points, etc.

The grading of exams won't use grade breakpoints that are any higher than those above, but they may be lower depending upon the difficulty of the test.

Do contributions to the discussion forums count toward your final grade? To an extent. **Contributing to discussions after introducing yourself is not a Philosophy 8 course**
requirement, but introducing yourself is. I will give you 50 points toward your homework grade when you introduce yourself in our first forum by January 25. And I invite you to submit one or two (at most) examples of informal fallacies to the fallacies discussion forum during the period in which we’re focusing on fallacies. For each genuine fallacy, I’ll give you an extra 75 points toward your total homework score. Textbook examples of fallacies are not acceptable. Neither are examples taken from fallacy websites such as fallacyfiles.org and philosophy.lander.edu.

If averaging letter grades doesn’t reveal an obvious final course grade, and I need to make a calculation, then I use the UC-Berkeley system where an A=4, an A- = 3.7, a B+ = 3.3, a B=3, a B- = 2.7, etc. As our syllabus indicates, the first and second tests each count for 15% of the final course grade, the third test and homework each count for 20%, and the final exam counts for the remaining 30%. If, for example, your letter grades sum up to 3.7 or higher, then you automatically have an A for the course. If your letter grades sum up to between 2.7 and 3.49, then you have a B for the course. If your letter grades sum up to between 1.7 and 2.49, then you have a C for the course, etc. If you wind up between 3.5 and 3.7 or between 2.5 and 2.7 or between 1.5 and 1.7, then I look at factors such as any

YOUR FIRST DAYS IN THE COURSE

During this period you need to become familiar with the various components of the course. This process includes:

- Reading the syllabus and asking questions about any course requirements you may not be certain about. Once you read the syllabus, there's a button just below the online version at Etudes that you can click to acknowledge that you have read it and agree to its terms. **The College requires that you use the button to agree with the following:**
  - I affirm that I am the student who enrolled in this course. Furthermore, I affirm that I understand and agree to follow the regulations regarding academic integrity and the use of student data as described in the ECC Board Policy 5500 – Academic Honesty and Standards of Conduct Student Conduct Code that governs student rights and responsibilities. Failure to abide by the regulations may result in disciplinary action up to expulsion from the college as noted in ECC Administrative Procedure 5520.
- Logging in to Etudes and introducing yourself in our Introductions forum. Logging in is required by the end of the first week.
- You need to list in Etudes whatever email address you prefer to use during the course. Go to My Workspace and then Account to enter or modify an address. By default your email address is not visible to other members of the class, but you can change that and other parts of your profile by clicking on the Discussion and Private Message menu item on the left and then clicking on My Profile at the top. I need email addresses for class mailings. You aren’t required to provide any further Etudes profile information.
- Logging in to Aplia and reviewing the Aplia student FAQ.
- Making sure your computer meets the technical requirements for using both Etudes and Aplia.
- Reading section 1.1 of Hurley's text and completing the first set of exercises at the Aplia website, including the Introduction to Using Aplia Assignments exercise.
- There's an Etudes Questions for Professor Georges forum for matters of general interest.
discussion contributions and whether you've taken all the exams and done most of the homework. If those seem to be OK, I will give you the higher grade.

### COURSE CALENDAR

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<th>Period</th>
<th>Assignment - or Course Exam</th>
<th>Points</th>
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<td><strong>Basic Concepts</strong></td>
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<tr>
<td>January 20 – 25</td>
<td>Introduction to Using Aplia Assignments</td>
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<td>Arguments, Premises, and Conclusions</td>
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<td>Jan. 26 – Feb. 1</td>
<td>Recognizing Arguments</td>
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<td>Deduction and Induction</td>
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<td>February 2 – 8</td>
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<td>Argument Forms: Proving Invalidity</td>
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<td>February 10</td>
<td><strong>Online test: Hurley 1.1-1.5</strong></td>
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<td><strong>Informal Fallacies</strong></td>
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<td>February 10 – 15</td>
<td>Fallacies in General</td>
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<td>February 16 – 22</td>
<td>Fallacies of Relevance</td>
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<td>Fallacies of Weak Induction</td>
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<td>Feb. 23 – Mar. 1</td>
<td>Fallacies of Presumption, Ambiguity, and Grammatical Analogy</td>
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<td>Fallacies in Ordinary Language</td>
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<td>March 3</td>
<td><strong>Online test: Hurley 3.1-3.5</strong></td>
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<td><strong>Categorical Propositions</strong></td>
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<td>March 3 – 8</td>
<td>The Components of Categorical Propositions</td>
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<td>March 9 – 22</td>
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<td>(Spring Break)</td>
<td>Venn Diagrams and the Modern Square of Opposition</td>
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<td>March 23 – 30</td>
<td>Conversion, Obversion, and Contraposition</td>
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<td>The Traditional Square of Opposition</td>
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<td>Mar. 31 – Apr. 7</td>
<td>Venn Diagrams and the Traditional Standpoint</td>
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<td><strong>Categorical Syllogisms</strong></td>
<td>Standard Form, Mood, and Figure</td>
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<td>April 8 – 15</td>
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<td>April 17</td>
<td><strong>Online test: Hurley 4.1-4.6 and 5.1-5.3</strong></td>
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**Propositional Logic**

| April 18 – 26 | Propositional Logic: Symbols and Translation | 178 |
| April 27 – May 3 | Truth Functions | 133 |
|               | Truth Tables for Propositions | 245 |
| May 4 – 10 | Truth Tables for Arguments | 97 |
|               | Argument Forms and Fallacies | 78 |

**May 13 (ECC, 6-8pm, SOCS 117)** | **Onsite Final Exam: Hurley 1.1-1.4 and 3.1-3.5 and 6.1-6.4 and 6.6** |

**ECC Withdrawal Policy**

It is the student’s responsibility to withdraw from a class they are not able to complete. Withdrawals can be made online or at the Admissions Office. The deadline date is listed in the current Class Schedule. Failure to complete this process may result in the assignment of a letter grade of A through F.

**How to Reach Me**

I typically will be online on Monday evenings from 7:00pm - 8:00pm Pacific Time, among other times.

E-mail: [Joe.Georges@Gmail.com](mailto:Joe.Georges@Gmail.com) (preferred) or [jgeorges@elcamino.edu](mailto:jgeorges@elcamino.edu)

If you email me, please include your full name somewhere in your message, either in the "From:" line or in the body of your message. Don't assume that I’ll
remember who "MrNiceGuy" or "PrincessLucy" is.

I’ll generally respond to email on weekdays within 12 hours, and often much sooner.

ADA Statement:

El Camino College is committed to providing educational accommodations for students with disabilities upon the timely request by the student to the instructor. A student with a disability who would like to request an academic accommodation is responsible for identifying herself/himself to the instructor and to the Special Resource Center. To make arrangements for academic accommodations, contact the Special Resource Center

Course Policies and Expectations of Student Conduct

I encourage you to read the student handbook for online classes. The handbook can be downloaded from http://www.elcamino.edu/library/distance-ed/docs/FA14StudentHandbook.pdf

You are responsible for saving all assignments properly so that you can turn them in online. Tests cannot be taken late unless arrangements are made with me. One make-up test is permitted in the course.

You must do your own work. Quizzes, etc. must be your own work in your own words. Plagiarism certainly includes cutting and pasting information from websites without attribution and paraphrasing someone else’s ideas or writing without attribution. When citing ideas or facts from another source, always give credit. Plagiarized work will be given an “F”. The college policy on academic dishonesty is at the end of this syllabus.

Disrespectful behavior in discussion forums is unacceptable. Students will be expected to treat all others in the class with the same respect they would want given to them. Disrespectful behavior can result in being dropped from the course. Note that anonymous postings aren’t allowed in course discussions.

When you leave messages in our discussion forums, please avoid using large fonts and/or boldface fonts for entire messages. Their use for entire messages is the web equivalent of shouting.

Materials used in connection with this course are generally subject to copyright protection. You can use them for this class only until the end of the term. Learn more about copyright at the U.S. Copyright Office web site at http://lcweb.loc.gov/copyright.

Our Etudes course website has a "Questions for Professor Georges" forum for you to ask general questions about the class, assignments, etc. Please use private email for questions about your own specific assignments, test results, etc.

Others who might access this class: As a courtesy, I’m letting you know that there might be others, such as course evaluators, and college technical support people, who would have access to our class websites from time to time.

Disclaimer: Students will be notified ahead of time when and if any changes are made to course requirements or policies