Introduction to both informal and basic formal logic, including both deductive and inductive logic, validity (both formal and informal), soundness, informal fallacies, and an analysis of the pragmatic functions of language within argumentative speech and writing.

(F,Sp,Su)

Requisites
Prerequisite: Reading Level 5

Student Learning Outcomes
Upon successful completion of this course, students should be able to:

A. Identify arguments, premises, and conclusions
B. Judge both the validity and soundness of deductive arguments
C. Judge the relative strength of inductive arguments
D. Analyze arguments for fallacies of reasoning
E. Employ any two of the following—Truth Tables, Propositional Logic, Venn Diagrams
F. Appraise the logical/critical qualities of arguments used in everyday life

Materials

Introduction to Logic and Critical Thinking Version 1.4

Author: Matthew J. Van Cleave
Publisher: OER
Edition: 1.4
ISBN: OER
Availability: Free on course website
Price: Free

Van Cleave, Matthew J. *Introduction to Logic and Critical Thinking, version 1.4.* (A free, "open textbook" available as a PDF document through D2L.)

-In addition, many resources will be posted on D2L, including videos demonstrating certain skills you will be learning in the course.
Evaluation

**Modules (weeks, under the current course scheme) will open every Wednesday at 8 AM and close every Tuesday at 11:30 PM.**

**Grade Description:**

**Quizzes:** will be taken on D2L and are due by the dates listed there (note that the quizzes will be due by 11:30 pm on the dates they are due). Many of the quizzes will give you immediate feedback on how you are doing and explain the mistakes you've made.

I allow you to retake some quizzes so you can try them and get some immediate feedback on them - kind of like having the answers at the end of the book for your homework. However, there are two ground rules you need to follow when utilizing this style of quiz:

1. The quiz will often show you two different answers that mean the same thing in parentheses. The outer parentheses that D2L puts around a correct answer are not part of the correct formal answer - so if the answer is ‘(~R v D), those parentheses are superfluous, and should not be considered the answer. As well, some answers will be correct in two ways because two statements are equivalent - so some answers may say (~ (R&D), ~R v ~D). This means that either answer is correct. It does not mean both are correct at the same time. If you simply copy and paste this, or you copy and paste both answers, with a comma between them, you will not have gotten the answer correct. You need to be able to discern what the correct answer is and isn't in the answer key, and if you just put all answers in that are possible, you will not receive points for answering the question correctly.

2. Since the quiz allows you to click through to see the answers, it is possible to click through and see the answers and then fill out the quiz. Heed this warning, though: it will show me that you have first clicked through the quiz and received a 0 without answering any question, in which case my policy is to only grade your first - blank - quiz (meaning you will receive a 0). This same policy will be kept in place for students entering answers irrelevant to the quiz to obtain the answer and enter it. Essentially, any manner of cheating the quizzes to obtain the answers will result in only your first attempt counting for points on the affected quizzes.

**Unit exams:** will be taken online and will be given in a timed setting. There will be four unit exams.

**Final paper:** You will write one paper in this course, which will consist of an analysis of a real argument for a position on some issue on the show Intelligence Squared. Each person in the class must turn in their own paper via the dropbox on D2L. However, you will also work with each other on your final papers in small groups. This will be a 5 page paper – however, most of this will be taken up with mapping the argument’s structure. A template will be made available in the “content” section of D2L later in the semester. The final paper is worth 100 points.

**Group participation:** You will also receive a grade based on the quality of your interaction with the rest of your group for the final paper assignment. This group will be assigned and will be part of your active weekly participation in the course for the last two and a half weeks of the course.

**Extra Credit:** In addition, at the beginning and end of the semester there will be a departmental pretest and a departmental final, which is a cumulative exam consisting of 21 questions. That departmental final yields a possible 42 extra credit points, whereas the departmental pretest yields 10 points extra credit.

**LATE WORK:** Late work will only be accepted up to 1 week past its original due date. Any later work will not be accepted for a grade.

**Grade Breakdown:**

**Unit exams:** Four total; each worth 125 points (for a total of 500 points) [50%]

**Quizzes:** All 19 quizzes combined will count for 350 points [35%]

**Final paper:** 100 points [10%]
Group participation: 50 points [5%]

Departmental pretest & final: 52 points extra credit possible

Overall points: 1000 [100%]

Criteria

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<thead>
<tr>
<th>Type</th>
<th>Weight</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Exams or Tests</td>
<td>50%</td>
<td>4 @ 125 points, 500 points overall</td>
</tr>
<tr>
<td>Quizzes</td>
<td>35%</td>
<td>19 @ variable lengths, 350 points overall</td>
</tr>
<tr>
<td>Final Papers</td>
<td>10%</td>
<td>100 points</td>
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<tr>
<td>Group Participation</td>
<td>5%</td>
<td>50 points</td>
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Breakdown

<table>
<thead>
<tr>
<th>College Standard</th>
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<tbody>
<tr>
<td>College Grading Standards</td>
<td>Recommended Guidelines for Student Grades</td>
</tr>
<tr>
<td>4.0 --- Excellent</td>
<td>4.0 --- 90 – 100%</td>
</tr>
<tr>
<td>3.5 --- -----------</td>
<td>3.5 --- 85 – 89%</td>
</tr>
<tr>
<td>3.0 --- Good</td>
<td>3.0 --- 80 – 84%</td>
</tr>
<tr>
<td>2.5 --- -----------</td>
<td>2.5 --- 75 – 79%</td>
</tr>
<tr>
<td>2.0 --- Satisfactory</td>
<td>2.0 --- 70 – 74%</td>
</tr>
<tr>
<td>1.5 --- -----------</td>
<td>1.5 --- 65 – 69%</td>
</tr>
<tr>
<td>1.0 --- Poor</td>
<td>1.0 --- 60 – 64%</td>
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<tr>
<td>0.0 --- -----------</td>
<td>0.0 --- 0 – 59%</td>
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*Course Policies*

Attendance

Attendance is determined when the student logs into D2L, submits assignments on time, and takes exams at the approved time and place. It is the student's responsibility to contact the instructor if the student must miss a due date and to submit a new
schedule of due dates for instructor’s approval. Missing a scheduled activity, for any reason, including illness or late registration, in no way relieves the student of the responsibility for completing all work in the course to the satisfaction of the instructor according to the approved schedule.

Students are expected to submit all assignments, participate in all interactivity and take all exams according to the schedule (or make other arrangements well in advance of the scheduled due date). Failure to do so may result in academic penalty or withdrawal from the class. Students will want to check with their advisor regarding the impact of receiving a grade below 2.0 or a W (student or instructor-initiated) on financial aid or the attainment of certificates or degrees. International students may risk their visa status or be in non-compliance with INS regulations

Netiquette

Netiquette (or network etiquette) is defined as a set of principles developed to express courtesy and to help people act appropriately while sending e-mail and using the Internet. All of us (instructor and students) will demonstrate netiquette and civility whenever interacting with each other. Please use complete English sentences and not jargon or slang for all communications. Consider anything said in the public forums (web-based applications explored this semester) to be public information. Don’t post comments that may be controversial, abrasive, or in poor taste or information that may reveal too much personal information.

Plagiarism

The very nature of higher education requires that students adhere to accepted standards of academic integrity. Therefore, Lansing Community College has adopted a code of academic conduct and a statement of student academic integrity. These may be found in the Lansing Community College Catalog. The violations of academic integrity listed and defined are cheating and plagiarism. It is the student's responsibility to be aware of behaviors that constitute academic dishonesty.

For any of these violations, the student is subject to academic penalty and other disciplinary action. Academic penalty may consist of a "0.0" grade for the offending work or (with departmental approval) a "0.0" grade for the course.

Cheating

Each student is expected to be honest in his or her work. Cheating is dishonest. Cheating includes but is not limited to: (1) use of any unauthorized assistance, including electronic devices/media or on-line resources, in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments such as those involving sounds as well as moving or still images; or (3) the acquisition of tests or other academic materials without permission of the faculty or staff to whom the material belongs. Any interaction with any person other than the instructor or proctor in a testing situation may be interpreted as cheating. Academic honesty is twofold on the part of the student; first, not to cheat, and second, not to enable others to cheat. For any of these violations, the student is subject to academic penalty and other disciplinary action. Academic penalty will consist of a "0.0" grade for the offending work and may (with departmental approval) consist in a "0.0" grade for the course.

Disruptive Behavior

Behavior that interferes with normal college-sponsored activities, including, but not limited to, the instructional process, the classroom - both on-campus and virtual, studying, teaching, research, college administration, disciplinary procedures, extracurricular and co-curricular activities, designated areas of activities, fire, security, or emergency services; or inciting others to commit disruptive behavior. The consequences are addressed in the catalog.
Computer Resources – Acceptable Use

Use of College-owned computer resources is a privilege extended by the College to students, employees, and other authorized users as a tool to promote the mission of the College. All users agree to be bound by the terms and conditions of the LCC Acceptable Use Policy at the time they complete an account application form. Copies of the LCC Acceptable Use Policy are available at the Library Circulation Desk and may also be accessed online.

Theft or Other Abuse of Computer Facilities and Resources, including but not limited to:

1. Unauthorized entry into a file, to use, read, or change the contents, or for any other purpose.
2. Unauthorized transfer of a file.
3. Use of another individual’s identification and/or password.
4. Use of computing facilities and resources to interfere with the work of another student, faculty member or college official.
5. Use of computing facilities and resources to send obscene or abusive messages.
6. Use of computing facilities and resources to interfere with normal operation of the college computing system.
7. Use of computing facilities and resources in violation of copyright laws.
8. Any violation of the college’s Acceptable Use Policy

Institutional Policies

Transfer Potential

For transfer information, please consult the LCC website at http://www.lcc.edu/transfer.

The Michigan Transfer Agreement (MTA) and the MACRAO Transfer Agreement simplify the transfer of students from one Michigan institution to another. MACRAO will be replaced by the MTA which is effective for students entering Fall 2014 or later. Students who started prior to Fall 2014 will be able to complete the MACRAO Transfer Agreement through Summer 2019, or they may complete the MTA requirements. The most current MTA information can be found at http://www.lcc.edu/transfer/mta.aspx and the current MACRAO information is available at http://www.lcc.edu/transfer/macrao_agreement.aspx.

For additional transfer information contact the Academic Advising Center in the Gannon Building - Star Zone, (517) 483-1904.

Disability Statement

Students with disabilities who believe that they may need accommodations in this class are encouraged to contact the Center for Student Access, Gannon Building, Star Zone - Campus Resources (http://lcc.edu/odss) or by calling (517) 483-1924 [TTY (517) 483-1207] as soon as possible to better ensure that such accommodations are implemented in a timely fashion.

Student Code of Conduct and General Rules and Guidelines

LCC supports a positive educational environment that will benefit student success. In order to ensure this vision, the College has established the LCC Student Code of Conduct and the Student General Rules and Guidelines to ensure the protection of student rights and the health and safety of the College community, as well as to support the efficient operation of College programs. In addition, the College has established guidelines for the redress of grievances by individuals accused in such proceedings. A copy of the most current Code can be found on the College’s website at http://www.lcc.edu/catalog/policies_procedures/studentrulesguidelines.aspx#code.

It is the responsibility of the student to be familiar with, and abide by, the Student Code of Conduct, as well as the General Rules and Guidelines. Furthermore, the instructor may establish reasonable guidelines within the classroom environment. Violations of the Student Code may be reported to the Office of Student Compliance.

Enrollment Verification

Class attendance and participation are essential to student success. Instructors will update class rosters by the 8th day after the...
start date of sections less than 8 weeks long, and by the 15th day after the start date of sections 8 weeks or longer to accurately reflect student enrollment in each course. Students who have not attended by these dates may be administratively dropped and responsible for any required tuition and fee charges.

**Academic Success Coaches**

Student success is our top priority here at Lansing Community College. Academic Success Coaches mentor students and help them navigate the college infrastructure and support network. They are focused on helping students successfully complete their educational, personal and career goals.

The *Academic Success Coaching Team* supports the mission of LCC in collaboration with faculty, staff and community partners. That support consists of assisting students with academic challenges as well as individualized support and advocacy for both on and off-campus difficulties that may negatively affect a student’s ability to successfully reach their educational goal.

Students should know that the LCC faculty and staff may refer them to a Success Coach if they recognize that additional mentoring or assistance may be helpful. We view such referrals as part of our mission to ensure all students can reach their potential while here at LCC. Students are also encouraged to contact an Academic Success Coach on their own, should they need help, guidance or assistance with any aspect of their educational process while attending LCC. During such encounters, students will receive proactive individualized coaching, mentoring and encouragement to remain engaged in the successful advancement of their educational goals.

To contact a Success Coach go to: [http://www.lcc.edu/aa/success_coaches/](http://www.lcc.edu/aa/success_coaches/) or call (517) 483-1422.

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**Additional Items**

**Detailed Outline of Course Content and Sequencing**

*Phil 151 12469 Schedule*

*THIS SCHEDULE MAY BE SUBJECT TO CHANGE. IF IT IS CHANGED YOU WILL BE NOTIFIED BY EMAIL LONG BEFORE THE CHANGE HAPPENS.*

All modules (weeks) open on Wednesday morning at 8:00 AM and close Tuesday night at 11:30PM.

<table>
<thead>
<tr>
<th>UNIT 1</th>
<th>8/24-8/29</th>
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<tr>
<td><strong>UNIT 1</strong></td>
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<tr>
<td>Week 1</td>
<td>8/24-8/29</td>
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<tr>
<td>Identifying arguments: <em>Introduction to Logic and Critical Thinking (LCT)</em>, sections 1.1-1.3, Logic Assessment Pre-test (Extra Credit)</td>
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<tr>
<td>Quizzes 1 &amp; 2</td>
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<tr>
<td><strong>8/26 Face-to-face meeting - 11:30a-1:30p at</strong></td>
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<tr>
<td><em>Welcome Center Building, Baker College, 1309 S M-52, Owosso 48867</em></td>
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<thead>
<tr>
<th>Week 2</th>
<th>8/30-9/5</th>
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<tr>
<td>Reconstructing arguments, Validity: <em>LCT</em>, section 1.4-1.9</td>
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<tr>
<td>Quiz 3-5</td>
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<thead>
<tr>
<th>Week 3</th>
<th>9/6-9/12</th>
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<tr>
<td>Rhetorical techniques: <em>LCT</em>, sections 1.10-1.11</td>
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Evaluating a real-life argument: *LCT*, section 1.12

Quiz 6

Week 4 9/13-9/19

Exam I: Analyzing Arguments (available 9/13-9/19)

**UNIT 2**

Week 5 9/20-9/26

Propositional logic: *LCT*, sections 2.1-2.3

Quizzes 7-9

Week 6 9/27-10/3

Propositional logic: *LCT*, sections 2.4-2.6

Quizzes 10 & 11

Week 7 10/4-10/10

Propositional logic: *LCT*, sections 2.7-2.10

Proofs: *LCT*, section 2.11-2.13

Quizzes 12 & 13

10/7 Face-to-face meeting - 11:30a-1:30p at

*Welcome Center Building, Baker College, 1309 S M-52, Owosso 48867*

Week 8 10/11-10/17

Propositional logic: *LCT*, sections 2.7-2.10

Categorical logic: *LCT*, sections 2.14-2.17

Quizzes 14-16

Week 9 10/18-10/24

Categorical logic: *LCT*, 2.14-2.17

Exam II: Formal Logic (available 10/18-10/24)
Week 10 10/25-10/31
   Inductive arguments: *LCT*, section 3.1
   Inductive arguments: *LCT*, sections 3.2-3.3
   Quiz 17

Week 11 11/1-11/7
   Inductive arguments: *LCT*, section 3.4
   Inductive arguments: *LCT*, section 3.5
   Quizzes 18 & 19
   11/4 Face-to-face meeting - 11:30a-1:30p at
   Welcome Center Building, Baker College, 1309 S M-52, Owosso 48867

Week 12 11/8-11/14
   Probabilistic fallacies: *LCT*, section 3.6
   Probabilistic fallacies: *LCT*, section 3.7
   Group Work

Week 13 11/15-11/21
   Probabilistic fallacies: *LCT*, section 3.8
   Probabilistic fallacies: *LCT*, sections 3.9-3.10
   Group Work

Week 14 11/22-11/28
   Exam III: Inductive and Probabilistic Reasoning (avail. Apr. 10-16)
   Informal fallacies: *LCT*, section 4.1
   Group Work

Week 15 11/29-12/5
   Informal fallacies: *LCT*, section 4.2
   Informal fallacies: *LCT*, section 4.3
Group Work

Week 16 12/6-12/12
- Exam IV: Informal Fallacies (due Dec. 12th)
- Logic Assessment Post-test (comprehensive, for extra credit)

Week 17 12/13-12/18 (MONDAY)
- Final papers due Tuesday, December 12th @ 11:30pm (in dropbox in D2L)