

PHI 230 – Introduction to Logic

Master Syllabus

Prerequisite: ENG 111
Credit hours: 3

Corequisite: None
Contact Hours: 3

Required Texts

Please check with the bookstore for the current textbook.

Course Description

This course introduces basic concepts and techniques for distinguishing between good and bad reasoning. Emphasis is placed on deduction, induction, validity, soundness, syllogisms, truth functions, predicate logic, analogical inference, common fallacies, and scientific methods. Upon completion, students should be able to analyze arguments, distinguish between deductive and inductive arguments, test validity, and appraise inductive reasoning. *This course has been approved to satisfy the Comprehensive Articulation general education core requirement in humanities/fine arts.*

Course Objectives

Course Goal

Upon completion, students should be able to analyze arguments, distinguish between deductive and inductive arguments, test validity, and appraise inductive reasoning.

Course-Specific Competences (Intended Outcomes)

Upon satisfactory completion of the course, the student will be able to:

1. Recognize and recall basic concepts
2. Distinguish different varieties of meaning and definitions
3. Recognize informal fallacies
4. Translate ordinary language statements into categorical form
5. Analyze categorical propositions using the Square of Opposition (traditional and modern) and Venn Diagrams
6. Formulate and analyze arguments in propositional Logic
7. Apply Rules of Natural Deduction to translations of ordinary language arguments
8. Construct conditional and indirect proof in propositional logic
9. Apply analogical and statistical reasoning to selected problems

Assessment and Evaluation

Individual instructors will vary. Check the condensed syllabus your instructor gives out in class.

Class Attendance

Regular and punctual class attendance is expected of all students for them to achieve their potentials in class and to develop desirable personal traits necessary to succeed in employment. Instructional time missed is a serious deterrent to learning. Students are responsible for fulfilling the requirements of the course by attending and completing course assignments. An accurate record of class attendance will be kept.

If instructional time is missed for excusable reasons, the student will be permitted to make up work to the extent possible. Because of the nature of some learning experiences, especially clinics, labs and shops, it is difficult, if not impossible to duplicate the work of the class. In some courses, absence or tardiness of an individual may be a major disruption to the performance of others in the class or an inconvenience to other organizations such as hospitals and clinics. The faculty may develop guidelines for advance notice of absences, makeup of work, etc. Students will be informed of guidelines at the beginning of the course.

To receive course credit, a student should attend a minimum of 80% of the contact hours of the class. Upon accumulating absences exceeding 20% of the course contact hours, the student may be dropped from the class and will be awarded a grade of "U," unless the student follows the official withdrawal procedure before the grade of "U" is recorded. A tardy is defined as arriving late for class, leaving early, or being away from class without permission during class hours. Three tardies may constitute one absence.

It is the joint responsibility of the student and instructor to discuss attendance patterns that will endanger the success of the student in the course. If it appears that a student will not be able to complete a course successfully, the instructor may advise the student to withdraw no later than the official withdrawal date at the 75% point of the class.

Code of Classroom Conduct

Asheville-Buncombe Technical Community College is an institution for adult learning. It is a partnership between instructors with the desire to teach and students with the desire to learn. In order to create an appropriate environment for teaching and learning to flourish, there must be respect for the instructor and fellow students. Listed below are guidelines for classroom behavior which the College has established to ensure that the learning environment is not compromised.

1. **Attendance:** You are expected to be in class the entire class time. Do not enter late or leave early. Rare exceptions may be excused, particularly under emergency circumstances, but you should be prepared to explain your tardiness to the instructor after class. Likewise, the need to leave early should be explained to the instructor before class.
2. **Absences:** Inform the instructor in advance, if you know you are going to miss a class. Also, take responsibility for getting missed assignments from other students. Do not expect that you will be allowed to make up work, such as unannounced quizzes or tests, after an absence. Instructors are not responsible for re-teaching the material you missed because of absence.
3. **Conversation:** Do not carry on side conversations in class.
4. **Other Activities:** You may not work on other activities while in class. This includes homework for other courses or other personal activities.

5. Internet: In classes where Internet access is provided, you may use the Internet for valid, academic purposes only. You may not use it for open access to other non-academic sites which are unrelated to the course.
6. Sleep: Do not sleep in class.
7. Attitude: You are expected to maintain a civil attitude in class. You may not use inappropriate or offensive commentary or body language to show your attitude regarding the course, the instructor, assignments, or fellow students.
8. Profanity and Offensive Language: You may not use profanity or offensive language in class.
9. Cell phones and beepers: You may not receive or send telephone calls or pages during class. You are responsible for turning off cell phones and beepers upon entering class.
10. Guests: You may not bring unregistered friends or children to class.
11. Food, Drink, Tobacco Products: You may not have food or drink in class. You may not use tobacco products in the buildings of A-B Tech.
12. Personal Business: You may need to transact personal business with the instructor, asking him or her to sign forms. Plan to do this before instruction begins or after class.

Typically, violations of the Code of Classroom Conduct will be dealt with as minor infractions. However, repetition of minor infractions or other more serious violations of the Code of Student Conduct may lead to removal from the classroom while the matter is resolved and referral to the Vice President for Student Services for disciplinary action.

Academic Dishonesty

You may not deceive any official of the college by cheating on any assignment, exam, or paper. This includes plagiarism, which is the intentional theft or unacknowledged use of another's words or ideas. Plagiarism includes (but is not limited to) paraphrasing or summarizing another's words or works without proper acknowledgement, using direct quotes of material without proper acknowledgement, or purchasing or using a paper or presentation written or produced by another. The faculty at A-B Tech may also consider presenting as original work a paper written for one class to satisfy a requirement in another class to be academic dishonesty.

Inclement Weather Schedule

The College will close when weather conditions are such that driving is hazardous.

The following procedure will be observed for inclement weather conditions:

1. Announcements concerning school operation will be made by 6:30 am on local radio and TV stations for day classes. A voice mail message will be recorded on the switchboard. If it appears that ice or snow may be cleared by mid-morning, the schedule below will be followed and all College personnel and students should report by 10am.

Normal Class Time	Delayed Opening
8 a.m.	10-10:40 a.m.
8:30 a.m.	10:20-11 a.m.

9 a.m.	10:45-11:25 a.m.
9:30 a.m.	11:05-11:45 a.m.
10 a.m.	11:30am-12:10 p.m.
10:30 a.m.	11:50am-12:30 p.m.
11 a.m.	12:15-12:55 p.m.
11:30 a.m.	12:35-1:15 p.m.
12 p.m.	1-1:40 p.m.
12:30 p.m.	1:20-2 p.m.
1 p.m.	1:45-2:25 p.m.
1:30 p.m.	2:05-2:45 p.m.
2 p.m.	2:30-3:10 p.m.
2:30 p.m.	2:50-3:30 p.m.
3 p.m.	3:15-3:55 p.m.
3:30 p.m.	3:35-4:15 p.m.
4 p.m.	4 p.m.

Important: If weather conditions become worse after the 6:30am announcement, an additional announcement closing school for the day will be made no later than 8:30am.

2. Closing or delaying the day programs does not automatically close evening classes. Announcements will be made on radio stations and the College switchboard no later than 3pm concerning the evening classes.
3. When weather conditions dictate early dismissal of the day or evening classes, the announcement will be made by telephone to each building on campus.
4. Commuters should exercise personal judgment concerning highway conditions regardless of College announcements, particularly those commuting from outlying areas.
5. Adjustments in the College calendar for days missed because of inclement weather will be made at the end of the semester.
6. Coman Student Center will open at 8am for early arrivals.

Activity Day Schedule

This schedule will be used for most approved and announced student activities.

Normal Class Time	Activity Day Schedule
8:00 am	8:00-8:40 am
8:30 am	8:20-9:00 am
9:00 am	8:45-9:25 am
9:30 am	9:05-9:45 am
10:00 am	9:30-10:10 am
10:30 am	9:50-10:30 am
11:00 am	10:15-10:55 am

11:30 am 10:35-11:00 am*

11:00 am-1:00 pm Free for activities !

12:00 noon	1:00-1:40 pm
12:30 pm	1:20-2:00 pm
1:00 pm	1:45-2:25 pm
1:30 pm	2:05-2:45 pm
2:00 pm	2:30-3:10 pm
2:30 pm	2:50-3:30pm
3:00 pm	3:15-3:55 pm
3:30 pm	3:35-4:15pm
4:00 pm	4:00 pm

* 25 minute period

General Education Reinforcing Experiences

The matrix below cross references the course specific intended outcomes with the specific learning activities, assessments (both direct and indirect), and evaluations associated with that particular outcome. Additionally, the reinforcement activities provided for selected General Education Cross-Curriculum competencies are identified.

General Education Cross-Curriculum Competencies

1. Communicate effectively in speaking, writing, reading, and listening.
2. Locate, evaluate, and use information to analyze problems and make logical decisions.
3. Apply math skills and/or natural science knowledge appropriately to organize, analyze and make information useful.
4. Demonstrate basic competency in computer technology.
5. Demonstrate an appreciation of the various manifestations of cultural diversity.
6. Develop the ability to succeed as a self-directed learner.
7. Apply critical thinking skills in analyze the physical, social, emotional, intellectual, aesthetic or philosophical factors that influence personal development.

Course-Specific Objective	Associated Learning Activity	Means of Assessment (Direct)	Means of Assessment (Indirect)	Means of Evaluation	GenEd Reinforcement Experiences
Recognize and recall basic concepts	Lectures Guest Speakers Reading		Journals Surveys Interviews	College Grading Scale for:	1, 2, 4, 5, 6, 7

	Assignments Writing Assignments Online Assignments Collaborative Learning Activities Quizzes Comprehensive Final Exam	Writing Assignments Online Assignments Collaborative Learning Activities Quizzes Comprehensive Final Exam		Writing Assignments Online Assignments Collaborative Learning Activities Quizzes Comprehensive Final Exam	
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Course-Specific Objective	Associated Learning Activity	Means of Assessment (Direct)	Means of Assessment (Indirect)	Means of Evaluation	GenEd Reinforcement Experiences
Distinguish different varieties of meaning and definitions	Lectures Guest Speakers Reading Assignments Writing Assignments Online	Writing Assignments Online	Journals Surveys Interviews	College Grading Scale for: Writing Assignments Online Assignments	1, 2, 4, 5, 6, 7

	Assignments	Assignments		Collaborative Learning Activities	
	Collaborative Learning Activities	Collaborative Learning Activities		Quizzes	
	Quizzes	Quizzes		Comprehensive Final Exam	
	Comprehensive Final Exam	Comprehensive Final Exam			

Course-Specific Objective	Associated Learning Activity	Means of Assessment (Direct)	Means of Assessment (Indirect)	Means of Evaluation	GenEd Reinforcement Experiences
Recognize informal fallacies	Lectures Guest Speakers Reading Assignments Writing Assignments Online Assignments	Writing Assignments Online	Journals Surveys Interviews	College Grading Scale for: Writing Assignments Online	1, 2,, 4, 5, 6, 7

	Collaborative Learning Activities Quizzes Comprehensive Final Exam	Assignments Collaborative Learning Activities Quizzes Comprehensive Final Exam		Assignments Collaborative Learning Activities Quizzes Comprehensive Final Exam	
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Course-Specific Objective	Associated Learning Activity	Means of Assessment (Direct)	Means of Assessment (Indirect)	Means of Evaluation	GenEd Reinforcement Experiences
Translate ordinary language statements into categorical form	Lectures Guest Speakers Reading Assignments Writing Assignments Online Assignments Collaborative Learning	 Writing Assignments Online Assignments Collaborative	Journals Surveys Interviews	College Grading Scale for: Writing Assignments Online Assignments Collaborative	1, 2, 4, 5, 6, 7

	Activities Quizzes Comprehensive Final Exam	Learning Activities Quizzes Comprehensive Final Exam		Learning Activities Quizzes Comprehensive Final Exam	
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Course-Specific Objective	Associated Learning Activity	Means of Assessment (Direct)	Means of Assessment (Indirect)	Means of Evaluation	GenEd Reinforcement Experiences
Analyze categorical propositions using the Square of Opposition (traditional and modern) and Venn Diagrams	Lectures Guest Speakers Reading Assignments Writing Assignments Online Assignments Collaborative Learning Activities	 Writing Assignments Online Assignments Collaborative Learning	 Journals Surveys Interviews	College Grading Scale for: Writing Assignments Online Assignments Collaborative Learning Activities	1, 2, 4, 5, 6, 7

	Quizzes Comprehensive Final Exam	Activities Quizzes Comprehensive Final Exam		Quizzes Comprehensive Final Exam	
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Course-Specific Objective	Associated Learning Activity	Means of Assessment (Direct)	Means of Assessment (Indirect)	Means of Evaluation	GenEd Reinforcement Experiences
Formulate and analyze arguments in propositional Logic	Lectures Guest Speakers Reading Assignments Writing Assignments Online Assignments Collaborative Learning Activities Quizzes	Writing Assignments Online Assignments Collaborative Learning Activities Quizzes	Journals Surveys Interviews	College Grading Scale for: Writing Assignments Online Assignments Collaborative Learning Activities Quizzes	1, 2, 4, 5, 6, 7

	Comprehensive Final Exam	Comprehensive Final Exam		Comprehensive Final Exam	
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Course-Specific Objective	Associated Learning Activity	Means of Assessment (Direct)	Means of Assessment (Indirect)	Means of Evaluation	GenEd Reinforcement Experiences
Apply Rules of Natural Deduction to translations of ordinary language arguments	Lectures Guest Speakers Reading Assignments Writing Assignments Online Assignments Collaborative Learning Activities	Writing Assignments Online Assignments Collaborative Learning Activities	Journals Surveys Interviews	College Grading Scale for: Writing Assignments Online Assignments Collaborative Learning Activities	1, 2, 4, 5, 6, 7

	Quizzes Comprehensive Final Exam	Quizzes Comprehensive Final Exam		Quizzes Comprehensive Final Exam	
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Course-Specific Objective	Associated Learning Activity	Means of Assessment (Direct)	Means of Assessment (Indirect)	Means of Evaluation	GenEd Reinforcement Experiences
Construct conditional and indirect proof in propositional logic	Lectures Guest Speakers Reading Assignments Writing Assignments Online Assignments Collaborative Learning Activities Quizzes Comprehensive	 Writing Assignments Online Assignments Collaborative Learning Activities Quizzes Comprehensive	Journals Surveys Interviews	College Grading Scale for: Writing Assignments Online Assignments Collaborative Learning Activities Quizzes Comprehensive Final Exam	1, 2, 4, 5, 6, 7

	Final Exam	Final Exam			
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Course-Specific Objective	Associated Learning Activity	Means of Assessment (Direct)	Means of Assessment (Indirect)	Means of Evaluation	GenEd Reinforcement Experiences
Apply analogical and statistical reasoning to selected problems	Lectures Guest Speakers Reading Assignments Writing Assignments Online Assignments Collaborative Learning Activities Quizzes Comprehensive Final Exam	Writing Assignments Online Assignments Collaborative Learning Activities Quizzes Comprehensive Final Exam	Journals Surveys Interviews	College Grading Scale for: Writing Assignments Online Assignments Collaborative Learning Activities Quizzes Comprehensive Final Exam	1, 2, 4, 5, 6, 7

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